APP-003018

OPERATIONS OF RELOAD LOGISTICS NAMIBIA ON ERF 5739, WALVIS BAY

ENVIRONMENTAL ASSESSMENT SCOPING REPORT

Assessed by:

Assessed for:

November 2021

Project:	**OPERATIONS OF RELOAD LOGISTICS NAMIBIA ON ERF 5739, WALVIS BAY: ENVIRONMENTAL ASSESSMENT SCOPING REPORT**	
Report: **Version/Date:**	Final November 2021	
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Report Approval	 **André Faul** Conservation Ecologist	

I R.A. Walgaard acting as the Proponent's representative (Reload Logistics Namibia (Pty) Ltd), hereby approve this report and confirm that the project description contained in herein is a true reflection of the information which the proponent has provided to Geo Pollution Technologies. All material information in the possession of the proponent that reasonably has or may have the potential of influencing any decision or the objectivity of this assessment is fairly represented in this report.

Signed at JOHANNESBURG on the 8th day of NOVEMBER 2021.

Reload Logistics Namibia (Pty) Ltd

Company Registration

EXECUTIVE SUMMARY

Reload Logistics Namibia (Pty) Ltd (the Proponent) requested Geo Pollution Technologies (Pty) Ltd to conduct an environmental scoping assessment for their proposed operations on erf 5739, Rössing Street, in the new light industrial area of Walvis Bay (extension 12). The Proponent intends to operate a warehouse for the receipt, storage and packaging of copper related products such as copper cathodes and copper concentrates. Both the cathodes and concentrates are partially refined copper, originating from copper mines located in southern Africa. The copper cathodes and copper concentrates are destined for international manufactures of various copper products.

The study is conducted to determine all environmental, safety, health and socio-economic impacts associated with the development and operations of the facility. Relevant environmental data has been compiled by making use of secondary data and a reconnaissance site visit. Potential environmental impacts and associated social impacts were identified and are addressed in this report.

Due to the nature and location of the facility, impacts can be expected on the surrounding environment, see summary impacts table below. The facility is surrounded by industrial and commercial properties. It is recommended that environmental performance be monitored regularly to ensure regulatory compliance and that corrective measures be taken if necessary. The operations of the facility will play and an important role in the export of copper products from the Southern African Development Community (SADC), via Namibia.

The major concerns related to the operations of the facility are that of increased traffic and noise and possible work related injuries on site. Noise pollution should meet the requirements of the World Health Organisation standards. Trucks should not be allowed to obstruct traffic in the surrounding internal road network. By appointing local contractors and employees and implementing educational programs the positive socio-economic impacts can be maximised while mitigating any negative impacts.

The environmental management plan (EMP) included in Section 10 of this document should be used as an on-site reference document during all phases of the facility. All monitoring and records kept should be included in a report to ensure compliance with the EMP. Parties responsible for transgression of the EMP should be held responsible for any rehabilitation that may need to be undertaken. A Health, Safety, Environment and Quality policy as well as Environmental Policy could be used in conjunction with the EMP. Operators and responsible personnel must be taught the contents of these documents. Municipal or national regulations and guidelines must be adhered to and monitored regularly as outlined in the EMP.

Impact Summary Class Values Prior to Mitigation

Impact Category	Impact Type	Construction		Operations	
	Positive Rating Scale: Maximum Value	5		5	
	Negative Rating Scale: Maximum Value		-5		-5
EO	Skills, Technology and Development	2		3	
EO	Revenue Generation and Employment	2		3	
SC	Demographic Profile and Community Health		-1		-2
SC	Traffic		-1		-2
SC	Health, Safety and Security		-2		-3
PC	Fire and Explosion		-3		-3
PC	Noise		-2		-2
PC/BE	Dust and Air Quality		-2		-2
PC	Waste Production		-2		-2
BE	Ecosystem and Biodiversity Impact		-1		-2
PC/BE	Groundwater, Surface Water and Soil Contamination		-2		-2
SC	Visual Impact		-1		-1
PC	Cumulative Impact				-2

BE = Biological/Ecological EO = Economical/Operational PC = Physical/Chemical SC = Sociological/Cultural

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LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
BE	Biological/Ecological
DWA	Department of Water Affairs
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EMA	Environmental Management Act No 7 of 2007
EMP	Environmental Management Plan
EMS	Environmental Management System
EO	Economic/Operational
ES	Environmental Classification
GPT	Geo Pollution Technologies
HIV	Human Immunodeficiency Virus
IAPs	Interested and Affected Parties
IBL	Internal Boundary Layer
IUCN	International Union for Conservation of Nature
m/s	Meter per second
MABL	Marine Atmospheric Boundary Layer
mbs	Meters below surface
MEFT	Ministry of Environment, Forestry and Tourism
mm/a	Millimetres per annum
mm/a	Millimetres per annum
MSDS	Material Safety Data Sheet
NaCl	Sodium chloride
PBL	Planetary Boundary Layer
PC	Physical/Chemical
PPE	Personal Protective Equipment
ppm	Parts per million
SAH	South Atlantic High
SANS	South African National Standards
SC	Sociological/Cultural
SO_2	Sulfur dioxide
TIBL	Thermal Internal Boundary Layer
WHO	World Health Organization

GLOSSARY OF TERMS

Alternatives - A possible course of action, in place of another, that would meet the same purpose and need but which would avoid or minimize negative impacts or enhance project benefits. These can include alternative locations/sites, routes, layouts, processes, designs, schedules and/or inputs. The "no-go" alternative constitutes the 'without project' option and provides a benchmark against which to evaluate changes; development should result in net benefit to society and should avoid undesirable negative impacts.

Assessment - The process of collecting, organising, analysing, interpreting and communicating information relevant to decision making.

Competent Authority - means a body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.

Construction - means the building, erection or modification of a facility, structure or infrastructure that is necessary for the undertaking of an activity, including the modification, alteration, upgrading or decommissioning of such facility, structure or infrastructure.

Copper Cathode – Plates (sheets) of highly refined copper used for the manufacturing of copper products.

Copper Concentrate – Partially refined copper ore with approximately 28% copper contents, which may also contain metal impurities such as cobalt, zinc and nickel.

Cumulative Impacts - in relation to an activity, means the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area.

Environment - As defined in the Environmental Assessment Policy and Environmental Management Act - "land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, palaeontological or social values".

Environmental Impact Assessment (EIA) - process of assessment of the effects of a development on the environment.

Environmental Management Plan (EMP) - A working document on environmental and socio-economic mitigation measures, which must be implemented by several responsible parties during all the phases of the proposed project.

Environmental Management System (EMS) - An Environment Management System, or EMS, is a comprehensive approach to managing environmental issues, integrating environment-oriented thinking into every aspect of business management. An EMS ensures environmental considerations are a priority, along with other concerns such as costs, product quality, investments, PR productivity and strategic planning. An EMS generally makes a positive impact on a company's bottom line. It increases efficiency and focuses on customer needs and marketplace conditions, improving both the company's financial and environmental performance. By using an EMS to convert environmental problems into commercial opportunities, companies usually become more competitive.

Evaluation – means the process of ascertaining the relative importance or significance of information, the light of people's values, preference and judgements in order to make a decision.

Hazard - Anything that has the potential to cause damage to life, property and/or the environment. The hazard of a particular material or installation is constant; that is, it would present the same hazard wherever it was present.

Interested and Affected Party (IAP) - any person, group of persons or organisation interested in, or affected by an activity; and any organ of state that may have jurisdiction over any aspect of the activity.

Mitigate - The implementation of practical measures to reduce adverse impacts.

Proponent (Applicant) - Any person who has submitted or intends to submit an application for an authorisation, as legislated by the Environmental Management Act no. 7 of 2007, to undertake an activity or activities identified as a listed activity or listed activities; or in any other notice published by the Minister or Ministry of Environment, Forestry & Tourism.

Public - Citizens who have diverse cultural, educational, political and socio-economic characteristics. The public is not a homogeneous and unified group of people with a set of agreed common interests and aims. There is no single public. There are a number of publics, some of whom may emerge at any time during the process depending on their particular concerns and the issues involved.

Scoping Process - process of identifying: issues that will be relevant for consideration of the application; the potential environmental impacts of the proposed activity; and alternatives to the proposed activity that are feasible and reasonable.

Significant Effect/Impact - means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.

Stakeholder Engagement - The process of engagement between stakeholders (the proponent, authorities and IAPs) during the planning, assessment, implementation and/or management of proposals or activities. The level of stakeholder engagement varies depending on the nature of the proposal or activity as well as the level of commitment by stakeholders to the process. Stakeholder engagement can therefore be described by a spectrum or continuum of increasing levels of engagement in the decision-making process. The term is considered to be more appropriate than the term "public participation".

Stakeholders - A sub-group of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term therefore includes the proponent, authorities (both the lead authority and other authorities) and all interested and affected parties (IAPs). The principle that environmental consultants and stakeholder engagement practitioners should be independent and unbiased excludes these groups from being considered stakeholders.

Sustainable Development - "Development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs and aspirations" – the definition of the World Commission on Environment and Development (1987). "Improving the quality of human life while living within the carrying capacity of supporting ecosystems" – the definition given in a publication called "Caring for the Earth: A Strategy for Sustainable Living" by the International Union for Conservation of Nature (IUCN), the United Nations Environment Programme and the World Wide Fund for Nature (1991).

1 BACKGROUND AND INTRODUCTION

Geo Pollution Technologies (Pty) Ltd was appointed by Reload Logistics Namibia (Pty) Ltd (the Proponent) to draft an environmental scoping assessment and environmental management plan for their proposed operations on erf 5739, Rössing Street, in the new light industrial area of Walvis Bay (Extension 12) (Figure 2-1). The Proponent intends to operate a warehouse for the receipt, storage and packaging of copper related products such as copper cathodes and copper concentrates in Walvis Bay.

In general, operations of the facility will involve:

- Receipt of copper cathodes and copper concentrate from southern African copper mines and its temporary storage and packing into shipping containers for export via the Port of Walvis Bay;
- Cargo clearing and forwarding;
- General operational activities and maintenance procedures associated with the warehouse.

The operations of the Proponent in Walvis Bay will aid in ensuring reliable logistic support to the copper mining industry in southern Africa.

A risk assessment was undertaken to determine the potential impact of the construction, operational and possible decommissioning phases associated with the project on the environment. The environment being defined in the Environmental Assessment Policy and Environmental Management Act as "land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, paleontological or social values".

The environmental assessment was conducted to apply for an environmental clearance certificate in compliance with Namibia's Environmental Management Act (Act No 7 of 2007).

Project Justification – Reload Logistics will aid in the export of copper related products originating from the mining sector of Namibia and other SADC countries via the Port of Walvis Bay. Copper related cargo will be transported between Namibia and other SADC countries via road. The Port of Walvis Bay aims at being the key port of call on the southwestern coast of Africa. Linked to the Port of Walvis Bay, the Walvis Bay Corridor Group aims at developing and promoting Namibia as the leading trade route for the SADC. This will be achieved through established corridor routes connecting the Port of Walvis Bay with its neighbours and beyond. The proposed handling and transport of copper products from the SADC mining sector fits in with the aims of the Port of Walvis Bay and the Walvis Bay Corridor group.

Benefits of the operations include:

- Revenue generation for Walvis Bay and Namibia as a whole;
- Reliable and safe transport of copper products from mining sectors of SADC countries;
- Employment, education and skills transfer;
- Diversification of economic activity;
- Potential inducement of additional investments and business opportunities.

2 SCOPE

The scope of the environmental assessment is to:

1. Determine the potential environmental impacts emanating from the proposed activities.
2. Identify a range of management actions which could mitigate the potential adverse impacts to acceptable levels.
3. Comply with Namibia's Environmental Management Act (2007).
4. Provide sufficient information to the Ministry of Environment, Forestry and Tourism and related authorities to make an informed decision regarding the proposed operations, construction activities and possible decommissioning of the facility.

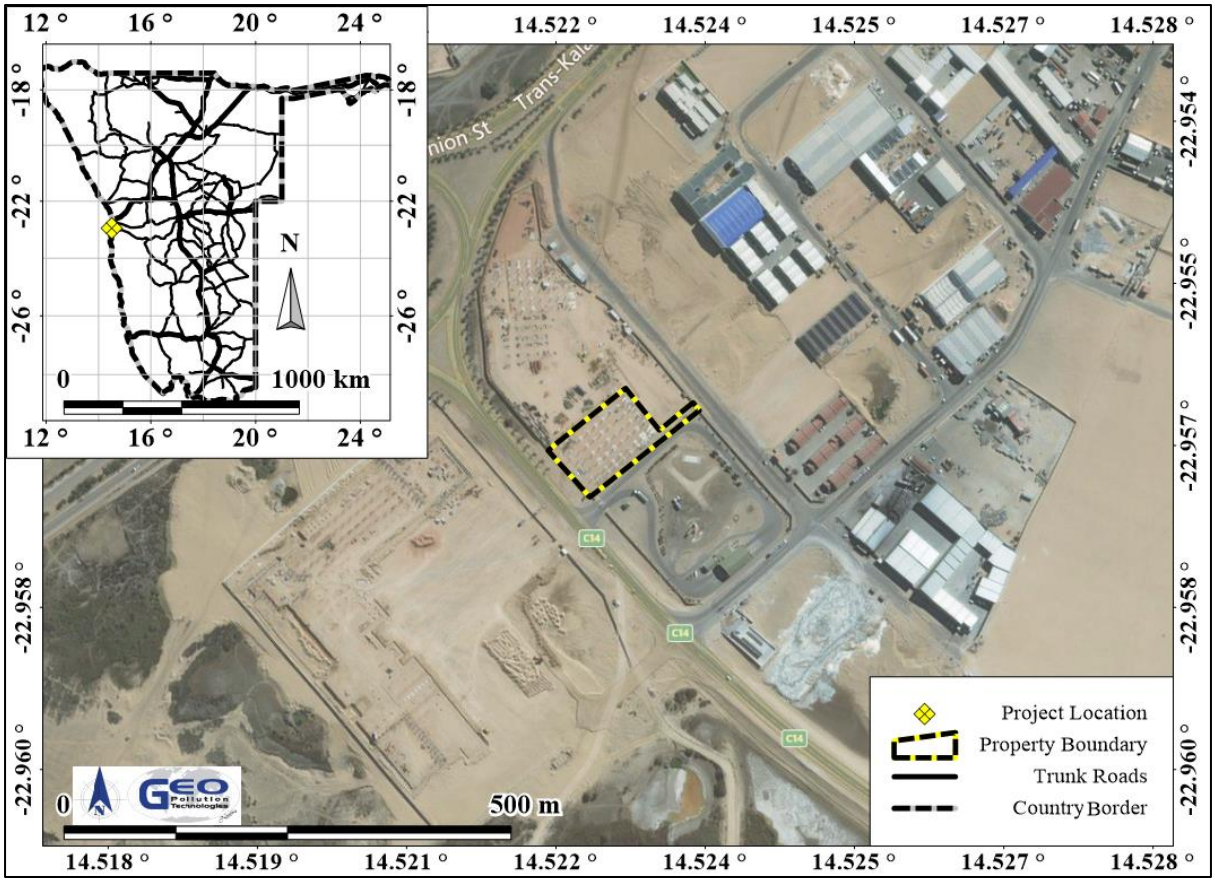

Figure 2-1. Project location

3 METHODOLOGY

The following methods were used to investigate the potential impacts on the social and natural environment due to the operations of the facility:

1. Baseline information about the site and its surroundings was obtained from existing secondary information as well as from primary information obtained during a reconnaissance site visit.
2. As part of the scoping process to determine potential environmental impacts, interested and affected parties (IAPs) were consulted about their views, comments and opinions and these are put forward in this report.
3. Based on gathered information and public and stakeholder consultation, an assessment of potential impacts was conducted and a management plan prepared.

4 FACILITY OPERATIONS AND RELATED ACTIVITIES

The site is an existing site owned by Dunes Lifestyle (Pty) Ltd and leased by the Proponent. The facility is being developed with all required infrastructure to allow for the proposed operations.

4.1 INFRASTRUCTURE

The site has an existing warehouse and is fenced off. All building plans were approved and a completion certificate issued by the Municipality of Walvis Bay. The warehouse will be fitted with state of the art surveillance, logistic and security infrastructure to ensure operations at the facility are being conducted effectively and safely. The site is accessed and exited via a gate on Rössing Street and is serviced with general utilities such as water, sewers and electricity, and will host the following:

- A 3439.99 m^2 bonded warehouse;
- Administrative office block within the warehouse;

- Security house at the entrance, manned by 24/7 security;
- Vehicle parking area;
- Truck weighbridge;
- Customs bonded area.

Access for trucks to the warehouse will be through roller doors which will be kept closed during handling of products and periods of strong wind. PPE requirement signage will be placed at the entrances of the warehouse.

Photo 4-1. Warehouse – south western side

Photo 4-2. Warehouse

Photo 4-3. Warehouse office area

Photo 4-4. Warehouse – north western side and truck scale (under construction)

4.2 OPERATIONAL ACTIVITIES

The facility will function as a receipt, storage, handling, and distribution hub for the export of mined copper from southern Africa. Partially refined copper products will be in the form of cathodes and copper concentrates, originating from copper mines located in southern Africa. An estimated 1,000 tons of copper is expected to be handled and will originate mainly from Zambia. The copper cathodes and copper concentrates are destined for international manufactures of various copper products. The copper products will be offloaded inside the warehouse, where it will be temporarily stored and then packed into containers for shipping purposes. Once containers are ready for shipment, they will be collected with flatbed trucks and transported to the container terminal of the Port of Walvis Bay. No processing of copper (e.g. smelting or refining) will take place on site.

The Proponent will ensure that all import and export documentation for cargo handled through the warehouse are in place, and that all cargo is sufficiently inspected and in line with Namibian legislation.

Figure 4-1. Site layout

5 ALTERNATIVES TO THE PROPOSED FACILITY

The warehouse is an existing facility located within a light industrial area of Walvis Bay. It is situated close to the Weigh Bridge and truck servicing facilities. It is in close proximity to the C14 Main Road that connects with newly constructed road east of the dune belt, specifically for the trucking industry. It is thus ideally located for the Proponent's activities. The location reduces transport and logistical costs and prevents additional environmental impacts such as traffic in more congested areas of the town. Therefor no alternative location is proposed. To reduce noise and security related impacts the warehouse is closed off and copper products will be handled and stored inside the warehouse. From an environmental perspective the environmental assessment did not find any reason why the facility may not operate at this site on condition that it complies with standards as prescribed by Namibian legislation or better.

6 ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programmes and policies deemed to have adverse impacts on the environment require an environmental assessment, as per the Namibian legislation. The legislation and standards provided in Table 6-1 to Table 6-4 govern the environmental assessment process in Namibia and/or are relevant to the facility.

Table 6-1. Namibian law applicable to the facility and related operations

Law	Key Aspects
The Namibian Constitution	♦ Promote the welfare of people ♦ Incorporates a high level of environmental protection ♦ Incorporates international agreements as part of Namibian law

Law	Key Aspects
Environmental Management Act Act No. 7 of 2007, Government Notice No. 232 of 2007	♦ Defines the environment ♦ Promote sustainable management of the environment and the use of natural resources ♦ Provide a process of assessment and control of activities with possible significant effects on the environment
Environmental Management Act Regulations Government Notice No. 28-30 of 2012	♦ Commencement of the Environmental Management Act ♦ List activities that requires an environmental clearance certificate ♦ Provide Environmental Impact Assessment Regulations
Local Authorities Act Act No. 23 of 1992, Government Notice No. 116 of 1992	♦ Define the powers, duties and functions of local authority councils ♦ Regulates discharges into sewers
Public Health Act Act No. 36 of 1919	♦ Provides for the protection of health of all people
Public and Environmental Health Act Act No. 1 of 2015, Government Notice No. 86 of 2015	♦ Provides a framework for a structured more uniform public and environmental health system, and for incidental matters ♦ Deals with Integrated Waste Management including waste collection disposal and recycling; waste generation and storage; and sanitation.
Labour Act Act No 11 of 2007, Government Notice No. 236 of 2007	♦ Provides for Labour Law and the protection and safety of employees ♦ Labour Act, 1992: Regulations relating to the health and safety of employees at work (Government Notice No. 156 of 1997)
Atmospheric Pollution Prevention Ordinance Ordinance No. 11 of 1976	♦ Governs the control of noxious or offensive gases ♦ Prohibits scheduled process without a registration certificate in a controlled area ♦ Requires best practical means for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process
Hazardous Substances Ordinance Ordinance No. 14 of 1974	♦ Applies to the manufacture, sale, use, disposal and dumping of hazardous substances as well as their import and export ♦ Aims to prevent hazardous substances from causing injury, ill-health or the death of human beings
Pollution Control and Waste Management Bill (draft document)	♦ Not in force yet ♦ Provides for prevention and control of pollution and waste ♦ Provides for procedures to be followed for licence applications
Road Traffic and Transport Act Act No. 52 of 1999 Government Notice No. 282 of 1999	♦ Provides for the control of traffic on public roads and the regulations pertaining to road transport
Road Traffic and Transport Regulations Government Notice No 53 of 2001	♦ Prohibits the transport of goods which are not safely contained within the body of the vehicle; or securely fastened to that vehicle, and which are not properly protected from being dislodged or spilled from that vehicle

Law	Key Aspects
Foreign Investment Act 27 of 1990 (as amended by Foreign Investment Amendment Act 24 of 1993)	♦ Provides for the promotion of foreign investment in Namibia ♦ Considers environmental impacts associated with foreign investments.

Table 6-2. Municipal by-laws, guidelines and regulations

Municipal By-laws, Guidelines or Regulations	Key Aspects
Integrated Urban Spatial Development Framework for Walvis Bay	♦ Overall vision to transform Walvis Bay to being the primary industrial city in Namibia ♦ Aims to ensure that appropriate levels of environmental management is enforced for all developments in Walvis Bay
Integrated Environmental Policy of Walvis Bay (Agenda 21 Project)	♦ Indicates the directions that the Municipality of Walvis Bay will move towards in the forthcoming years to fulfil its responsibilities to manage the environment of Walvis Bay together with the town's residents and institutions ♦ Strong focus on conservation and protection of environment
Municipal By-law 19 and 20 on Effluents Entering Sewers	♦ Regulates the discharge of effluent into sewers and prohibits the introduction of certain wastes or products including steam into the sewers system.
Town Planning Scheme No. 35	♦ Manages and regulates development related to land use. ♦ Proposes and identifies areas for specific future land use.

Table 6-3. Relevant Multilateral Environmental Agreements for Namibia and the Development

Agreement	Key Aspects
Stockholm Declaration on the Human Environment, Stockholm 1972.	♦ Recognizes the need for a common outlook and common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment.
1985 Vienna Convention for the Protection of the Ozone Layer	♦ Aims to protect human health and the environment against adverse effects from modification of the Ozone Layer are considered ♦ Adopted to regulate levels of greenhouse gas concentration in the atmosphere.
United Nations Framework Convention on Climate Change (UNFCCC)	♦ The Convention recognises that developing countries should be accorded appropriate assistance to enable them to fulfil the terms of the Convention.

Table 6-4. Standards or Codes of Practise

Standard or Code	Key Aspects
Namport Specifications and Legislation	♦ Enforced Standards and Codes which governs construction and operations relating to the port, and associated cargo handling.

The handling of the copper products is not per se a listed activity requiring an environmental clearance certificate as per the Environmental Management Act. However, in a proactive approach, the Proponent commissioned the environmental assessment in order to also comply with the general requirements of the mining industry who have strict environmental policies and regulations.

7 ENVIRONMENTAL CHARACTERISTICS

This section lists pertinent environmental characteristics of the study area and provides a statement on the potential environmental impacts on each.

7.1 LOCALITY AND SURROUNDING LAND USE

The facility is located on erf 5739, Rössing Street, within the new light industrial area of Walvis Bay (-22.9565°S, 14.5228°E) (Figure 7-1). The erf is thus zoned for light industrial use. The facility is neighboured to the north, east and south by activities of an industrial nature. Activities include truck repairs and logistic related activities (north), fuel and lubricant storage (east) and NATIS Weighbridge (south). The west of the site is neighboured by the C14 Main Road, with the Dunes Mall opposite the road. There are no heritage or cultural sites located on or in close proximity to the site.

Photo 7-1. Site entrance

Photo 7-2. Rössing Street

Photo 7-3. Southern neighbour

Photo 7-4. Eastern neighbour

Implications and Impacts

The site itself is situated in an area intended for industrial use. Activities surrounding the site is of similar nature. All storage and handling activities will take place within the warehouse to ensure impacts on neighbours are minimised. Operations may increase traffic within Rössing Street.

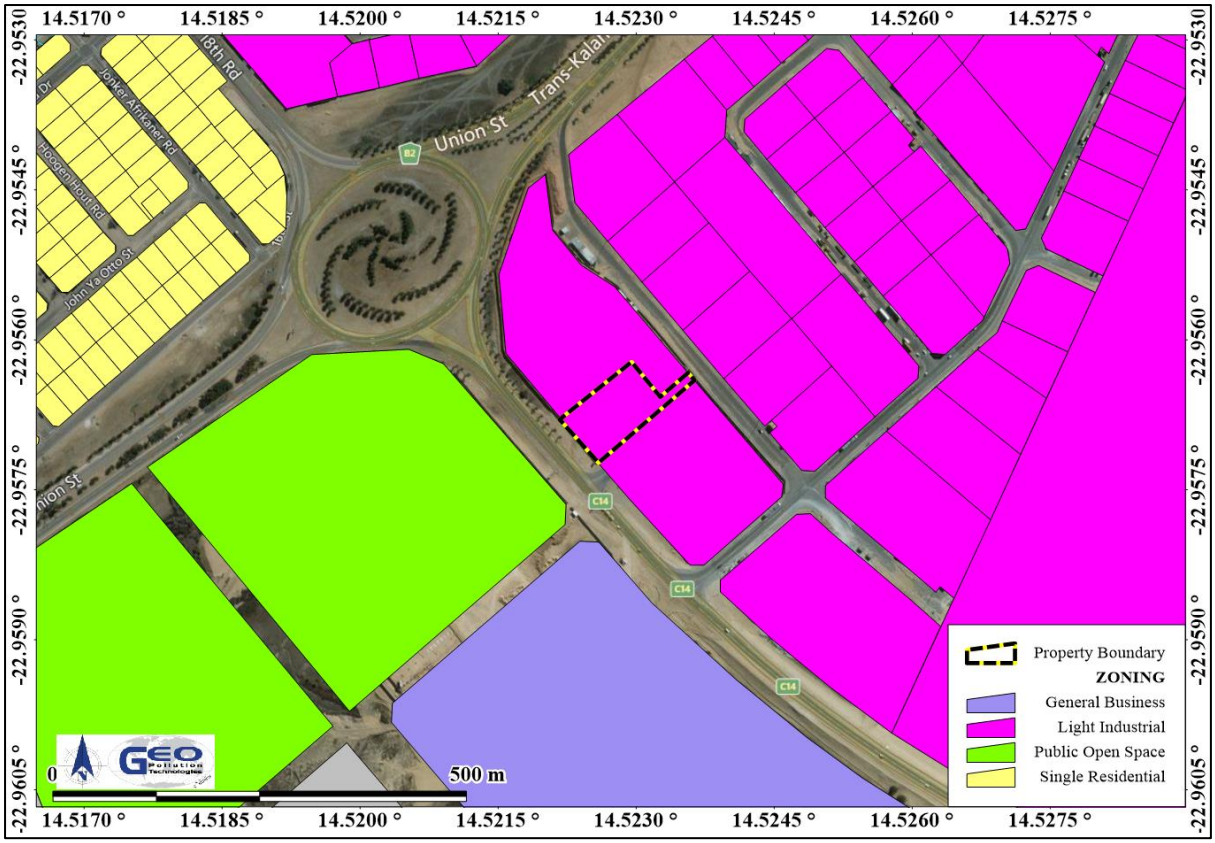

Figure 7-1. Surrounding land use

7.2 CLIMATE

Namibia's climate is dominated by dry conditions for most of the year and particularly so in the west. The location of Namibia with respect to the Intertropical Convergence Zone, Subtropical High Pressure Zone and Temperate Zone is what determines the climate, with the Subtropical High Pressure Zone being the major contributor to the dry conditions (Atlas of Namibia Project, 2002; Bryant, 2010), see Figure 7-2.

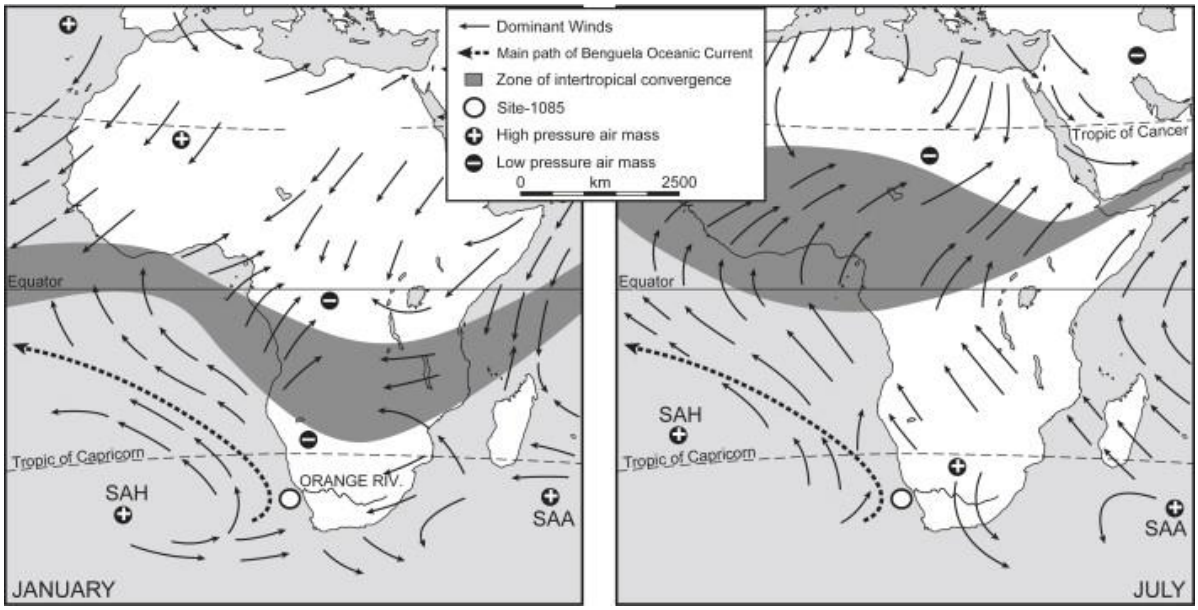

Figure 7-2. Map indicating the Intertropical Convergence Zone, Subtropical High Pressure Zone (SAH+), Benguela Current and Temperate Zone south of Tropic of Capricorn (not indicated) (from: http://www.meteoweb.eu)

Precipitation over Namibia is mainly controlled by the South Atlantic High (SAH), a high pressure cell (anticyclone) situated west of Namibia in the Subtropical High Pressure Zone. The SAH shifts during the year and is at higher latitudes in winter and lower latitudes in summer. In winter, as a result of being situated more north, the high pressure cell pushes any moisture originating from the Intertropical Convergence Zone northwards, preventing rain over Namibia. In summer, because the high pressure cell moves further south, and has less of an effect on the Intertropical Convergence Zone, moist air reaches Namibia, resulting in summer rains.

Studies indicate the presence of a thermal inversion layer at Walvis Bay. Originally this was thought to be at approximately 500 mamsl (Taljaard and Schumann 1940), but recent studies indicate it as low as 200 mamsl (Patricola and Chang, 2017; Corbett, 2018). A marine atmospheric boundary layer (MBL) exists offshore of the coastline that thins from more than 500 mamsl to 200 mamsl as it nears the coast (Figure 7-3). The MBL is a layer of cool, well-mixed, stable air that is capped by a thermal inversion (Patricola and Chang, 2016; Corbett 2018). This thermal layer or inversion layer will prevent the escape of pollutants such as smoke higher into the atmosphere. The MBL however contribute to high velocity wind speeds by funnelling the winds created by the SAH, resulting in what is referred to as the Benguela Low-Level Coastal Jet (Figure 7-3). Since the MBL overlap partially with the coastal plain, the wind generated by the Benguela Low-Level Coastal Jet also reaches inland, but diminishes relatively quickly further inland.

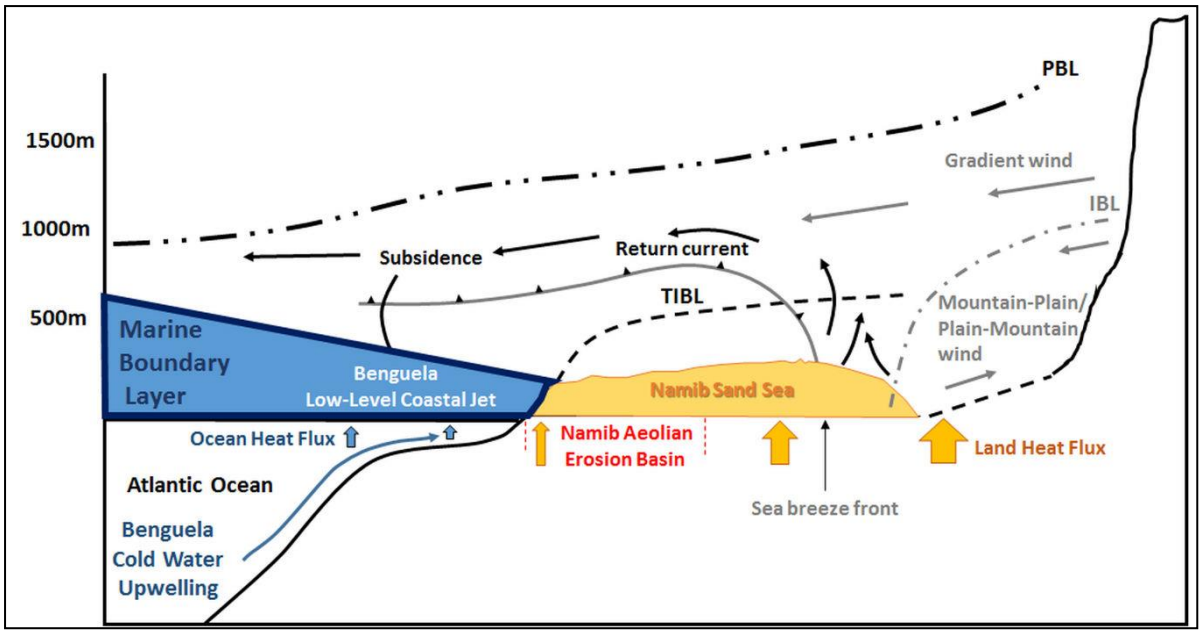

Figure 7-3. Marine atmospheric boundary layer (from: Corbett, 2018)

On a more localised scale, the climatic conditions on the central Namibian coast, and inland thereof (coastal plains), are strongly influenced by the cold Benguela Current, the SAH and the relatively flat coastal plains that are separated from the central highlands by a steep escarpment.

The anticlockwise circulation of the high pressure SAH and the action of the earth's Coriolis force results in strong southerly (longshore) winds blowing northwards up the coastline of Namibia (Bryant, 2010; Corbett, 2018). This longshore wind is responsible for upwelling of the cold, deep waters of the Benguela Current. As a result of the temperature difference between the cold surface water of the Benguela Current and the warm coastal plains, the southerly wind is diverted to a south south-westerly to south-westerly wind along the coast. At Walvis Bay the temperature gradient that forms over the warmer darker sands south of the Kuiseb River, compared with the cooler, lighter coloured gravel plain to the north of the river, leads to the formation of cyclonic circulation (localised low-pressure systems) centred over the dune area, due to warm air that rises over the dune area. This, together with topographical changes and land-use, causes a local deflection of wind flow over the Walvis Bay area, from south to southwest in

Walvis Bay (Figure 7-4), to more southwest to westerly further inland, as well as reduced wind speeds. The more low speed, westerly winds are for example experienced at the Walvis Bay Airport (Rooikop).

The winds are strongest in early to mid-summer (September to January) when the SAH is at its strongest and most persistent, and the temperature difference between the sea and the desert plains are at its greatest. Wind speeds then occasionally exceed 32 km/hr and usually peaks late morning to early afternoon. In winter, the SAH loses strength and the southerly to south-westerly winds are at their weakest. Winter winds do not have enough strength to reach far inland. Autumn to winter conditions do however promote the formation of east wind conditions (berg winds) that can reach speeds of more than 50 km/hr and transport a lot of sand. East winds occur when the inland plateau is cold with a localised high pressure cell, while a low pressure system is present at the coast. The high pressure cell forces air off the escarpment and as the air descents, it warms adiabatically as well as create a low pressure system due to the vertical expansion of the air column. The warm air flows toward the coastal low and as it passes over the Namib plains, it heats up even further. The wind manifests itself as very strong, warm and dry wind during the mornings to early afternoon, but dissipate in the late afternoon.

Throughout the year the prevailing night time regional wind is a weak easterly wind. This results when the mainland cools to below the temperature of the coastal water. This results in a coastal low versus an onshore high pressure system with first no wind in the early evening, when temperatures between water and land is similar, and then weak easterly winds as the temperature difference increase. Wind within the MBL remains dominated by the Benguela Low-Level Coastal Jet, causing a localised southerly wind over Walvis Bay, see Figure 7-4.

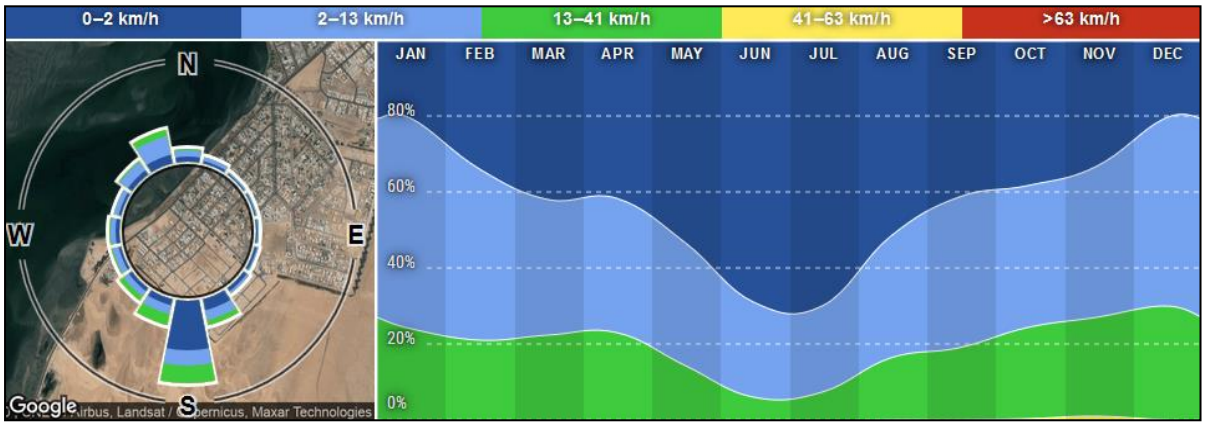

Figure 7-4. Wind direction and strength at the Walvis Bay Lagoon as measured between 2013 and 2020 (from: www.windfinder.com/windstatistics/walvis_bay_airport)

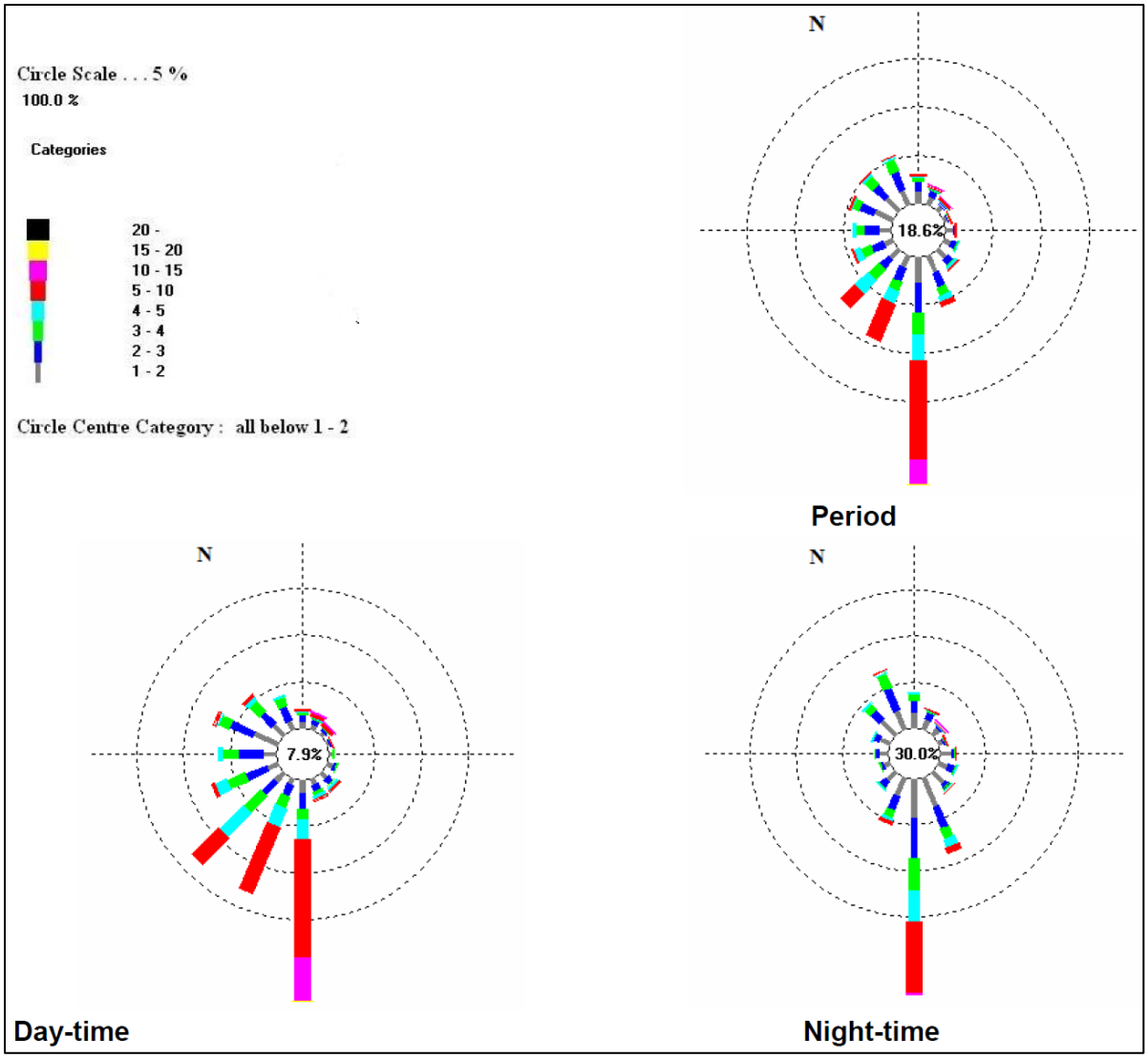

Figure 7-5. Period, daytime and night-time wind roses for Walvis Bay town for the period 2006 (Petzer, G. & von Gruenewaldt, R., 2008)

Temperature at Walvis Bay is strongly regulated by the cold Benguela current. As a result, there is typically limited variation between diurnal and seasonal temperatures. Average annual temperatures are approximately 18 °C to 19 °C with the maximum temperature seldom above 30 °C and minimums rarely below 5 °C (Figure 7-6). The only real temperature extremes are experienced during east wind conditions in the autumn to early winter months when temperatures can reach the upper thirties or even low forties. This results in these months having an average maximum temperature ranging from 30 °C to 35 °C. As one moves inland from Walvis Bay, daytime temperatures increases rather quickly while night time temperatures can get significantly colder in the desert environment.

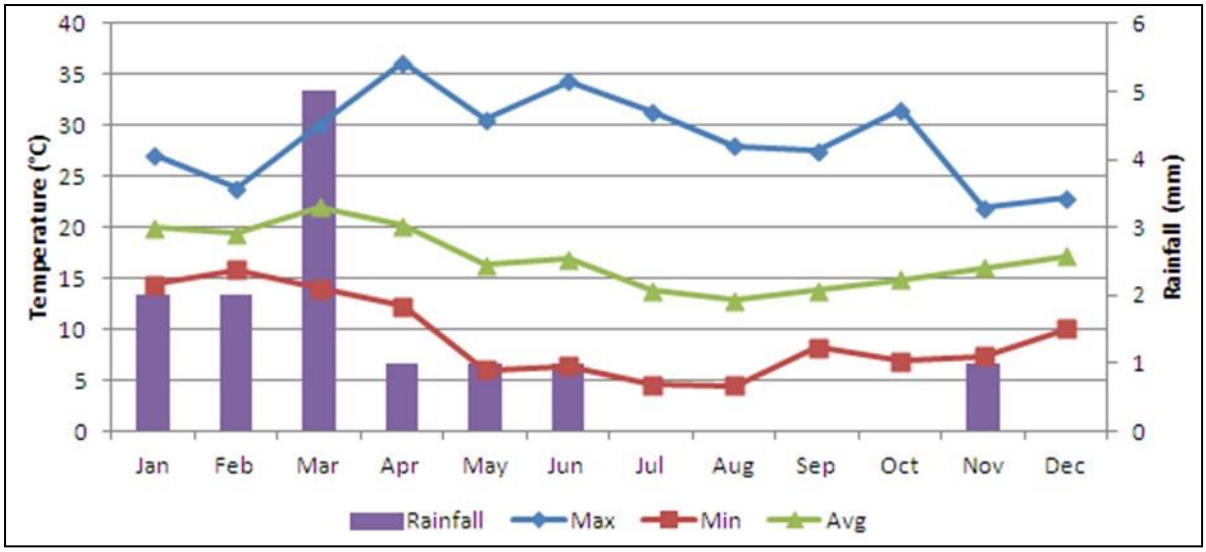

Figure 7-6. Temperature and rainfall at Walvis Bay (from: uMoya-NILU, 2020)

As explained above, the SAH severely limits the amount of rainfall over Namibia and especially at the coast and over the Namib Desert. As such, the average annual rainfall in Walvis Bay is below 50 mm (Figure 7-6), with 100% variation in annual rainfall. Infrequent, heavy rainfall does occur and typically results in rather chaotic conditions as Walvis Bay, and other coastal towns, has not been developed to cater for large volumes of storm water. Fog plays a very significant role as source of water for many plants and animals along Namibia's coast and the Namib Desert. Walvis Bay has up to 900 hours of fog per year and it results from the cold Benguela water cooling the humid air above it to such a temperature that the water vapour condenses to form fog and low level clouds (Mendelsohn et al., 2002).

Implications and Impacts

Water is a scarce and valuable resource in Namibia and Walvis Bay is characterized by low and extremely variable seasonal rainfall. This makes water an extremely vulnerable resource. Groundwater at the site is however saline and no impact on potable water supply is expected from operations at the facility. Periods of strong westerly to south-westerly wind, as well as north winds may carry airborne dust to nearby receptors.

7.3 CORROSIVE ENVIRONMENT

Walvis Bay is located in a very corrosive environment, which may be attributed to the frequent salt-laden fog, periodic winds and abundance of aggressive salts (dominantly NaCl and sulphates) in the soil. The periodic release of hydrogen sulphide (H_2S) from the ocean is expected to contribute to corrosion (see Table 6 for corrosion comparison data with other centres). See Figure 7-7 for corrosion comparison data with other centres.

The combination of high moisture and salt content of the surface soil can lead to rapid deterioration of subsurface metal (e.g. pipelines) and concrete structures. Chemical weathering of concrete structures due to the abundant salts in the soil is a concern.

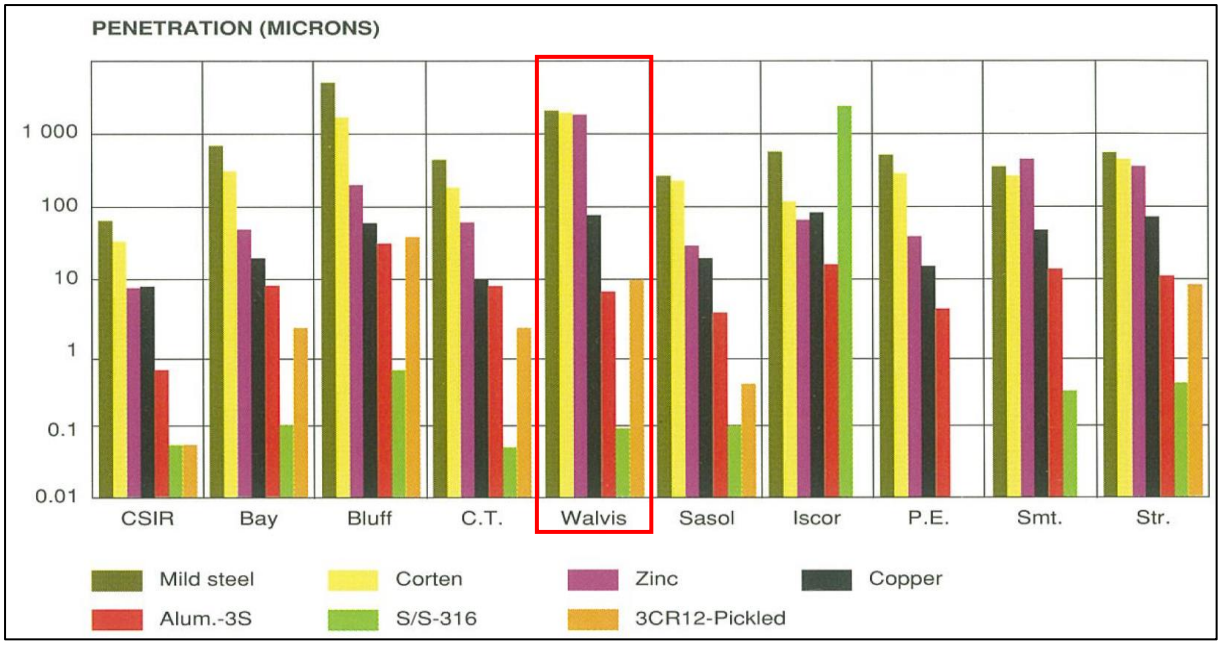

Figure 7-7. Twenty year corrosion exposure results in southern African towns (Callaghan 1991)

Implications and Impacts

Corrosion levels may be high and must be kept in mind when planning the maintenance of the facility and related infrastructure.

7.4 TOPOGRAPHY AND DRAINAGE

Walvis Bay is located in the Central Western Plain of Namibia. The Kuiseb River forms the southern boundary of this landscape group, with the Namib Dune Field being present south of the Kuiseb River. A bay is formed by a peninsula commonly known as Pelican Point. On the southern part of the bay is a lagoon which used to be the mouth of the Kuiseb River. Dune migration however forced the flow of the Kuiseb River to the north. This flow was stopped through the construction of a flood control wall to prevent flooding of the town of Walvis Bay, thus forcing the flood waters to move through the dune area to the lagoon. The Kuiseb River now rarely reaches the lagoon.

The topography on site is has been levelled. In general, the area has a gentle downward slope in an easterly direction. See Figure 7-8 for the surface drainage of the site. Drainage is poorly developed due to the lack of rainfall <50 mm/annum received in the area. A dune field is present southeast of Walvis Bay and also further to the northeast. These dunes generally migrate in a northerly direction. Further inland is the gravel plains of the central areas of the Namib Naukluft Park. Surface water around Walvis Bay is limited to the marine salt pans, lagoon and ocean as well as a man-made wetland formed as a result of the sewage treatment works. The site and surrounding areas are generally flat.

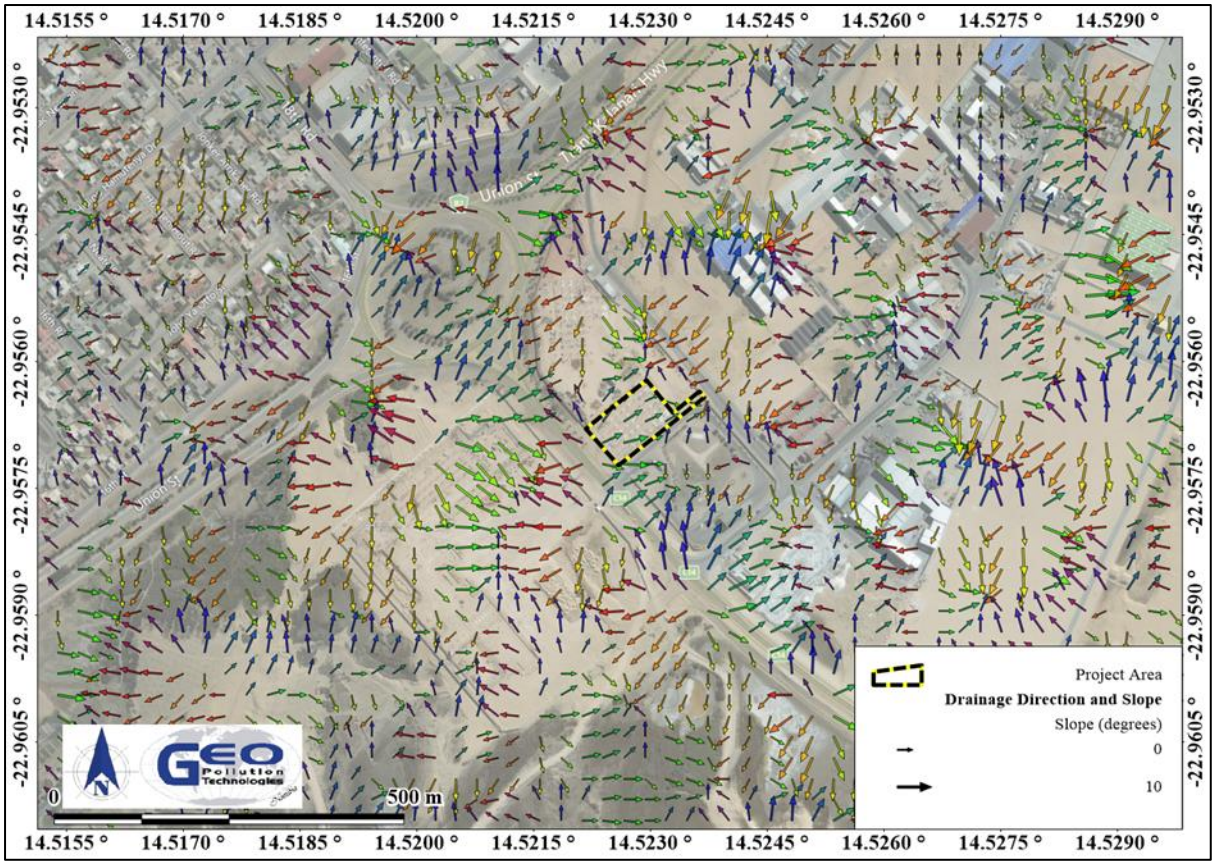

Figure 7-8. Drainage direction and slope

Implications and Impacts

Any pollutants that are not contained and are transported via surface water flow may be transported out of the site to the surrounding environment. No chemicals or other hazardous substances, except general cleaning and maintenance materials, will however be stored and handled in the warehouse.

7.5 GEOLOGY AND HYDROGEOLOGY

Walvis Bay is located in the Central Western Plain of Namibia. The Kuiseb River forms the southern boundary of this landscape group, with the Namib Dune Field being present south of the Kuiseb River. Northerly dune migration is forcing the Kuiseb River in a northerly direction, with Kuiseb River paleochannels being present as far south as Sandwich Harbour.

Following the breakup of West-Gondwana during the early Cretaceous (130 – 135 Ma ago), continental uplift took place, enhancing erosional cutback and the formation of the Namibian Escarpment. A narrow pediplain formed, mainly over Damara Age rocks. The South Central started filling in over the pediplain, with marine conditions established around 80 Ma ago. Towards the end of the Cretaceous (70 – 65 Ma ago) a relative level surface was created, on which later deposition of sediments took place. Marine deposition took place in the parts covered by the newly formed South Central Ocean, while terrestrial deposits took place on land. Further continental uplift moved the shoreline to its present position.

Northwards migration of sand covered parts of the exposed marine deposits, with Kuiseb floods also depositing material over the marine sediments. Depth to bedrock in Walvis Bay is expected to be deeper than 40 m below surface. Based on previous work conducted in the area, it is expected that the sediments under the project area would consist of medium to coarse grain sand with thin lenses of more clayey material and layers of shell material.

Groundwater in the area is expected less than 2 m below surface and most probably related to seawater intrusion. Shallow freshwater lenses might be present. The origin of these freshwater

lenses would mostly be freshwater leakages from the water supply reticulation as well as from the semi purified ponds present near the effluent treatment works.

Implications and Impacts

Groundwater is not utilised in the area. Pollution of the groundwater is however still prohibited. No chemicals or other hazardous substances, except general cleaning and maintenance materials, will however be stored and handled in the warehouse.

7.6 PUBLIC WATER SUPPLY

Public water supply to Walvis Bay and the surrounding developments is provided by NamWater from the NamWater Kuiseb Water Supply Scheme.

Implications and Impacts

Groundwater is saline and not used as potable water source. No potential contamination impact on water supply is thus expected. Water usage by the facility will be mainly for domestic use and is thus not expected to have a negative impact on public water supply.

7.7 FAUNA AND FLORA

The site is located within an industrial area which has previously been cleared of all vegetation. Of note nearby (3.8 km west) is the Walvis Bay Lagoon, the salt works and the southern part of the bay west of the lagoon, which are the key components of the 12,600 ha Ramsar site (Wetland of International Importance). It is important both as an over-wintering area for Palaearctic migrant wader species as well as for African species such as Greater and Lesser Flamingos, Great White Pelican and Chestnut-Banded Plovers.

The sewerage ponds, situated about 300 m east of the facility, are regarded as sensitive manmade wetlands. Although a manmade fresh water source, they are an attraction for pelicans and flamingos. These wetlands also support 53% of the duck and geese population in the area. The wetland is formed by the constant inflow of semi-purified water and supports extensive stands of reeds. There is also a flight path for birds between the sewerage ponds, the lagoon and the offshore bird breeding platform (Ghwano Island) 8 km north of the site. The site is near the flight paths for the three major habitats (lagoon, sewage ponds and Ghwano Island).

Implications and Impacts

The facility is located within an already disturbed light industrial area. Thus no immediate threat to biodiversity in the area is expected, however, uncontrolled pollution may and can cause damage to any biodiversity surrounding the site. Bright lighting may also negatively affects birds flying at night and may cause disorientation and collisions.

7.8 DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

At local level Walvis Bay has an urban population size of 62,096 (Namibia Statistics Agency, 2014) although the current estimate is around 90,000 to 100,000. Walvis Bay is the principal port of Namibia, and is an import/export facility for processed fish, mining products and beef. The area is linked to Namibia's air, rail and road network, making its port well situated to service Zambia, Zimbabwe, Botswana, Southern Angola and South Africa. The fishing industry is the major employer of low skilled workers on a permanent and seasonal basis. The total employment of this sector is estimated at 2% of the total Namibian workforce. Economic activities relate mostly to businesses within the area and around the site.

Table 7-1. Demographic characteristics of Walvis Bay, the Erongo Region and Nationally (Namibia Statistics Agency, 2011)

	Walvis Bay	Erongo Region	Namibia
Population (Males)	30,500*	79,823	1,021,912
Population (Females)	29,000*	70,986	1,091,165
Population (Total)	62,096	150,809	2,113,077
Unemployment (15+ years)	30%	22.6%	33.8%
Literacy (15+ years)	99%	96.7%	87.7%
Education at secondary level (15+ years)	86%	71.8%	51.2%
Households considered poor	Not available	5.1%	19.5%

Implications and Impacts

The facility will provide employment to people from the area. Some skills development and training also benefit employees during the operational phase.

7.9 HERITAGE, CULTURAL AND ARCHAEOLOGICAL ASPECTS

There are no church, mosques or related buildings in close proximity to the site. No known archaeological resources have been noted in the vicinity since the urbanisation of the area. No other structures, sites or spheres of heritage of cultural significance was determined to be in close proximity to the site.

8 PUBLIC CONSULTATION

Consultation with the public forms an integral component of an environmental assessment investigation and enables interested and affected parties (IAPs) e.g. neighbouring landowners, local authorities, environmental groups, civic associations and communities, to comment on the potential environmental impacts associated with projects and to identify additional issues which they feel should be addressed in the environmental assessment.

Public participation notices were advertised twice for two weeks in the national papers: Republikein and Namibian Sun on 13 and 20 September 2021. A site notice was placed at the Proponents facility. Interested and affected parties were identified and notified of the project. Notification letters were hand delivered to available neighbours as well as the Municipality of Walvis Bay. A meeting was held with the Municipality of Walvis Bay to discuss the project. During the meeting, it was noted that the proponent should apply for consent from the Municipality, specifying what hazardous substances will be stored within the warehouse. The Proponent initially included chemicals in the EIA, but it was subsequently removed. See Appendix A for proof of the public participation processes. No concerns regarding the project were raised during the public consultation phase.

9 MAJOR IDENTIFIED IMPACTS

During the scoping exercise a number of potential environmental impacts have been identified. The following section provides a brief description of the most important of these impacts.

9.1 NOISE IMPACTS

Noise pollution will exist due to heavy vehicles accessing the site to deliver and collect cargo as well as the use of forklifts and related machinery that may make use of audible warning sounds. The facility is however situated in a light industrial area and the majority of activities will be within the warehouse, mitigating noise impacts. Furthermore, the main operational hours will be from 06h00 to 18h00, reducing noise related impacts at night.

9.2 TRAFFIC IMPACTS

The site is located within the new light industrial area of Walvis Bay. During operations goods are transported to and from the warehouse with trucks. This is expected to result in increased

traffic along Rössing Street and the area, no in street parking is allowed along Rössing Street. The transport of goods throughout the country leads to additional traffic impacts in the town, the region and nationally. Impacts are however expected to be minimal as an average of only two trucks a day are expected to access the site. Heavy vehicles turning to access the site may result in increased damage to the road surface.

Increased traffic to the area may result in an increase in traffic related incidents, such as incidents involving other vehicles, pedestrians and damage to infrastructure.

9.3 SOCIO-ECONOMIC IMPACTS

Operations of reload logistics will provide employment opportunities to residents of Walvis Bay. The operational phase will create permanent employment opportunities and some training and skills development takes place.

10 ASSESSMENT AND MANAGEMENT OF IMPACTS

The purpose of this section is to assess and identify the most pertinent environmental impacts that are expected from the operational, construction (upgrades, maintenance, etc. – see glossary for "construction") and potential decommissioning activities of the facility. An EMP based on these identified impacts are also incorporated into this section.

For each impact an Environmental Classification was determined based on an adapted version of the Rapid Impact Assessment Method (Pastakia, 1998). Impacts are assessed according to the following categories: Importance of condition (A1); Magnitude of Change (A2); Permanence (B1); Reversibility (B2); and Cumulative Nature (B3) (see Table 10-1)

Ranking formulas are then calculated as follow:

Environmental Classification = A1 x A2 x (B1 + B2 + B3)

The environmental classification of impacts is provided in Table 10-2.

The probability ranking refers to the probability that a specific impact will happen following a risk event. These can be improbable (low likelihood); probable (distinct possibility); highly probable (most likely); and definite (impact will occur regardless of prevention measures).

Table 10-1. Assessment criteria

Criteria	Score
Importance of condition (A1) – assessed against the spatial boundaries of human interest it will affect	
Importance to national/international interest	4
Important to regional/national interest	3
Important to areas immediately outside the local condition	2
Important only to the local condition	1
No importance	0
Magnitude of change/effect (A2) – measure of scale in terms of benefit / disbenefit of an impact or condition	
Major positive benefit	3
Significant improvement in status quo	2
Improvement in status quo	1
No change in status quo	0
Negative change in status quo	-1
Significant negative disbenefit or change	-2
Major disbenefit or change	-3

Permanence (B1) – defines whether the condition is permanent or temporary	
No change/Not applicable	1
Temporary	2
Permanent	3
Reversibility (B2) – defines whether the condition can be changed and is a measure of the control over the condition	
No change/Not applicable	1
Reversible	2
Irreversible	3
Cumulative (B3) – reflects whether the effect will be a single direct impact or will include cumulative impacts over time, or synergistic effect with other conditions. It is a means of judging the sustainability of the condition – not to be confused with the permanence criterion.	
Light or No Cumulative Character/Not applicable	1
Moderate Cumulative Character	2
Strong Cumulative Character	3

Table 10-2. Environmental classification (Pastakia 1998)

Environmental Classification	Class Value	Description of Class
72 to 108	5	Extremely positive impact
36 to 71	4	Significantly positive impact
19 to 35	3	Moderately positive impact
10 to 18	2	Less positive impact
1 to 9	1	Reduced positive impact
0	-0	No alteration
-1 to -9	-1	Reduced negative impact
-10 to -18	-2	Less negative impact
-19 to -35	-3	Moderately negative impact
-36 to -71	-4	Significantly negative impact
-72 to -108	-5	Extremely Negative Impact

10.1 RISK ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN

The EMP provides management options to ensure impacts of the facility is minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary. The environmental management measures are provided in the tables and descriptions below. These management measures should be adhered to during the various phases of the operation of the facility. This section of the report can act as a stand-alone document. All personnel taking part in the operations of the facility should be made aware of the contents in this section, so as to plan the operations accordingly and in an environmentally sound manner.

The objectives of the EMP are:

- to include all components of construction activities (upgrades, maintenance, etc.) and operations of the facility;
- to prescribe the best practicable control methods to lessen the environmental impacts associated with the project;
- to monitor and audit the performance of operational personnel in applying such controls; and
- to ensure that appropriate environmental training is provided to responsible operational personnel.

Various potential and definite impacts will emanate from the operations, construction and decommissioning phases. The majority of these impacts can be mitigated or prevented. The impacts, risk rating of impacts as well as prevention and mitigation measures are listed below.

As depicted in the tables below, impacts related to the operational phase are expected to mostly be of low to medium significance and can mostly be mitigated to have a low significance. The extent of impacts are mostly site specific to local and are not of a permanent nature. Due to the nature of the surrounding areas, cumulative impacts are possible and include noise pollution and traffic impacts.

10.1.1 Planning

During the phases of planning for construction, operations and decommissioning of the facility, it is the responsibility of Proponent to ensure they are and remain compliant with all legal requirements. The Proponent must also ensure that all required management measures are in place prior to and during all phases, to ensure potential impacts and risks are minimised. The following actions are recommended for the planning phase and should continue during various other phases of the project:

- Ensure that all necessary permits from the various ministries, local authorities and any other bodies that governs the construction (maintenance) and operations of the project are in place and valid.
- Ensure all appointed contractors and employees enter into an agreement which includes the EMP. Ensure that the contents of the EMP are understood by the contractors, sub-contractors, employees and all personnel present or who will be present on site.
- Make provisions to have a Health, Safety and Environmental Coordinator to implement the EMP and oversee occupational health and safety as well as general environmental related compliance at the site.
- Have the following emergency plans, equipment and personnel on site where reasonable to deal with all potential emergencies:
    - Risk management / mitigation / EMP/ Emergency Response Plan and HSE Manuals
    - Adequate protection and indemnity insurance cover for incidents;
    - Comply with the provisions of all relevant safety standards;
    - Procedures, equipment and materials required for emergencies.
- If one has not already been established, establish and maintain a fund for future ecological restoration of the project site should project activities cease and the site is decommissioned and environmental restoration or pollution remediation is required.
- Establish and / or maintain a reporting system to report on aspects of construction activities, operations and decommissioning as outlined in the EMP.
- Submit bi-annual reports to the MEFT to allow for environmental clearance certificate renewal after three years. This is a requirement by MEFT.
- Appoint a specialist environmental consultant to update the EIA and EMP and apply for renewal of the environmental clearance certificate prior to expiry.

10.1.2 Skills, Technology and Development

During various phases of construction and operations, training will be provided to a portion of the workforce. Skills are transferred to an unskilled workforce for general tasks. The technology required for the development of the facility is often new to the local industry, aiding in operational efficiency. Development of people and technology are key to economic development.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Technological development and transfer of skills	2	1	2	3	1	12	2	Probable
Daily Operations	Technological development and transfer of skills	3	1	2	3	2	28	3	Definite
Indirect Impacts	Economic development	3	1	2	3	3	32	3	Definite

Desired Outcome: To see an increase in skills in Walvis Bay, as well as development and technology advancements in associated industries.

Actions

Mitigation:

- If the skills exist locally, contractors must first be sourced from the town, then the region and then nationally. Deviations from this practice must be justified.
- Skills development and improvement programs to be made available as identified during performance assessments.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Record should be kept of training provided.
- Ensure that all training is certified or managerial reference provided (proof provided to the employees) inclusive of training attendance, completion and implementation.

10.1.3 Revenue Generation and Employment

The change in land use will lead to changes in the way revenue is generated and paid to the national treasury. An increase of skilled and professional labour will take place due to the operations of the facility. Employment will be sourced locally while skilled labour/contractors may be sourced from other regions.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Employment and contribution to local economy	2	1	2	2	2	12	2	Definite
Daily Operations	Employment contribution to local economy	3	1	3	3	2	32	3	Definite
Indirect Impacts	Decrease in unemployment, increase in revenue generated	3	1	3	3	2	32	3	Definite

Desired Outcome: Contribution to national treasury and provision of employment to local Namibians.

Actions

Mitigation:

- The proponent must employ local Namibians where possible.
- If the skills exist locally, employees must first be sourced from the town, then the region and then nationally.
- Deviations from this practice must be justified.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Bi-annual summary report based on employee records.

10.1.4 Demographic Profile and Community Health

The project is reliant on labour during the operational phase. The scale of the project is limited and it is not expected to create a change in the demographic profile of the local community. Community health may be exposed to factors such as communicable disease like HIV/AIDS and alcoholism/drug abuse, associated with the trucking industry (transport of goods to and from Walvis Bay). An increase in foreign people in the area may potentially increase the risk of criminal and socially/culturally deviant behaviour.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Social ills related to unemployment and cross country transport	2	-1	1	1	2	-8	-1	Probable
Daily Operations	Social ills related to unemployment and cross country transport	2	-1	1	2	2	-10	-2	Probable
Indirect Impacts	The spread of diseases	3	-1	2	2	2	-18	-2	Probable

Desired Outcome: To prevent the in-migration and growth in informal settlements, prevent the spread of communicable disease and prevent / discourage socially deviant behaviour.

Actions:

Prevention:

- Employ only local people from the area where possible, deviations from this practice should be justified appropriately.
- Adhere to all municipal by-laws relating to environmental health which includes but is not limited to sanitation requirements.

Mitigation:

- Educational programmes for employees (especially truck drivers) on HIV/AIDs and general upliftment of employees' social status.
- Appointment of reputable contractors.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Facility inspection sheet for all areas which may present environmental health risks, kept on file.
- Bi-annual summary report based on educational programmes and training conducted.
- Bi-annual report and review of employee demographics.

10.1.5 Traffic

The warehouse is within an area zoned for light industrial to industrial use and will result in an increase in traffic along Rössing Street. The proposed handling of copper products will add to the amount of trucks accessing and leaving the site, as well as on the national road networks. Heavy vehicle turning in Rössing Street to access and leave the site may result in increased road damage.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Delivery of equipment and building supplies	1	-1	2	2	2	-6	-1	Probable
Daily Operations	Increase traffic, road wear and tear and accidents	2	-1	2	2	2	-12	-2	Probable

Desired Outcome: Minimum impact on traffic and no transport or traffic related incidents.

Actions

Mitigation:

- Trucks delivering or collecting goods should not be allowed to obstruct any traffic in surrounding areas and the town.
- Trucks associated with the facility should not be allowed to park or overnight in Rössing Street, and may only overnight at areas designated for this purpose.
- Adhere to Namport and Town Council regulations e.g. preferred routes through town and mitigation measures provided in Namport's EMP.
- Adhere to The Road Traffic and Transport Regulations, 2001 and all other applicable legislation related to road transport and maximum axle loads.
- If any traffic impacts are expected, traffic management should be performed to prevent these.
- The placement of signs to warn and direct traffic will mitigate traffic impacts.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- The Road Traffic and Transport Regulations, 2001
- Any complaints received regarding traffic issues should be recorded together with action taken to prevent impacts from repeating itself.
- A bi-annual report should be compiled of all incidents reported, complaints received, and action taken.

10.1.6 Health, Safety and Security

Every activity associated with the operational phase is reliant on human labour and therefore exposes them to health and safety risks. Activities such as the operation of machinery, unsafe stacking and falling from heights poses the main risks to employees. Security risks are related to unauthorized entry, theft and sabotage. Security risks are increased as a result of high value commodities such as copper cathodes stored and handled at the site.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Physical injuries and criminal activities	1	-2	3	3	1	-14	-2	Probable
Daily Operations	Physical injuries and criminal activities	2	-2	3	3	2	-32	-3	Probable

Desired Outcome: To prevent injury, health impacts and theft.

Actions

Prevention:

- Clearly label dangerous and restricted areas as well as dangerous equipment and products.
- Equipment that will be locked away on site must be placed in a way that does not encourage criminal activities (e.g. theft).
- Provide all employees with required and adequate personal protective equipment (PPE).
- Ensure that all personnel receive adequate training on operation of equipment.
- All health and safety standards specified in the Labour Act should be complied with.
- Implementation of maintenance register for all equipment.

Mitigation:

- Selected personnel should be trained in first aid and a first aid kit must be available on site. The contact details of all emergency services must be readily available.
- Security procedures and proper security measures must be in place to protect workers and cargo.
- Strict security that prevents unauthorised entry during all phases should be practiced, with access logs for vehicles and personnel.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any incidents must be recorded with action taken to prevent future occurrences.
- A bi-annual report should be compiled of all incidents reported. The report should contain dates when training were conducted and when safety equipment and structures were inspected and maintained.

10.1.7 Fire

Operational and development activities may increase the risk of the occurrence of fires if proper maintenance and housekeeping are not conducted. The site is located in a developed area, adjacent to a lubricant and fuel depot and fires on site can pose significant risks to surrounding operations.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Fire and explosion risk	2	-2	2	2	1	-20	-3	Improbable
Daily Operations	Fire and explosion risk	2	-2	2	2	2	-24	-3	Improbable

Desired Outcome: To prevent property damage, possible injury and impacts caused by uncontrolled fires.

Actions:

Prevention:

- Maintain regular site, mechanical and electrical inspections and maintenance.
- Ensure sufficient firefighting and fire prevention measure are in place.
- Regularly update the firefighting and prevention plan and equipment.
- Maintain firefighting equipment, good housekeeping and personnel training (firefighting, fire prevention and responsible housekeeping practices).

Mitigation:

- A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan and firefighting plan. The plan should consider risks posed to and by neighbouring properties.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of all incidents must be maintained on a daily basis. This should include measures taken to ensure that such incidents do not repeat themselves.
- A bi-annual report should be compiled of all incidents reported. The report should contain dates when fire drills were conducted and when fire equipment was tested and training given.

10.1.8 Noise

Noise pollution will exist due to heavy and light motor vehicles accessing the site to load and offload cargo as well as from the stacking and moving of containers and other large equipment. As the site is situated in a light industrial area and all cargo handling activities will take place within the warehouse, noise impacts on surrounding properties will be minimal. Operational hours will be limited to between 06h00 and 18h00, and night-time activities will be minimal. Construction (maintenance and upgrade) may generate excessive noise.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive noise generated from construction activities – nuisance and hearing loss	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Noise generated from the operational activities – nuisance and hearing loss	2	-1	2	2	2	-12	-2	Probable

Desired Outcome: To prevent any nuisance and hearing loss due to noise generated.

Actions

Prevention:

- The World Health Organization (WHO) guideline on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairment for workers on site should be followed during the construction and operational phases. This limits noise levels to an average of 70 dB over a 24 hour period with maximum noise levels not exceeding 110 dB during the period.
- Confine noise generating operational activities to daytime hours as far as possible.
- At night, the nuisance created by audible warning signals on trucks and forklifts can be prevented by switching to a flashing light or 'broadband white noise' system.

Mitigation:

- Hearing protectors as standard PPE for workers in situations with elevated noise levels.
- Maintain noise generating activities to within the warehouse as far as possible.
- All machinery must be regularly serviced to ensure minimal noise production.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- WHO Guidelines.
- Maintain a complaints register.
- Bi-annual report on complaints and actions taken to address complaints and prevent future occurrences.

10.1.9 Dust and Air Quality

Construction (maintenance) activities may result in increased dust generation. Dust and air quality impacts is however expected to be minimal during construction activities. Increased number of trucks in the area may reduce local ambient air quality due to an increase in emissions.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive dust, reduction in air quality.	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Windblown dust, reduction in air quality, nuisance and health impacts	2	-1	2	2	2	-12	-2	Improbable

Desired Outcome: To prevent nuisance and health impacts and to maintain the integrity of the built environment.

Actions

Mitigation:

- Dust suppression to be performed if required.
- All trucks transporting cargo must be service regularly and make use of technology to reduce emissions. This include selective catalytic reduction, diesel particulate filters and diesel oxidation catalysts.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- Any complaints received regarding dust and emissions must be recorded, investigated and the problem rectified.
- Any incidents must be recorded with action taken to prevent future occurrences.
- A bi-annual report should be compiled of all incidents reported and monitoring performed. The report should contain dates when safety equipment and structures were inspected and maintained.

10.1.10 Waste production

Various waste streams will result from the operational phase and development of the facility. Waste may include hazardous waste associated with fuel, oil or hydraulic fluid spills from trucks and machinery. Domestic waste will be generated by the facility and related operations. Waste presents a contamination risk and when not removed regularly may become a fire hazard. Construction waste may include building rubble and discarded equipment. Contaminated soil and water is considered as a hazardous waste.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Excessive waste production, littering, illegal dumping, contaminated materials	1	-2	2	2	2	-12	-2	Definite
Daily Operations	Excessive waste production, littering, contaminated materials	1	-2	2	2	2	-12	-2	Definite

Desired Outcome: To reduce the amount of waste produced, and prevent pollution and littering.

Actions

Prevention:

- Waste reduction measures should be implemented and all waste that can be re-used / recycled must be kept separate.
- Ensure adequate temporary waste storage facilities are available.
- Ensure waste cannot be blown away by wind.
- Prevent scavenging (human and non-human) of waste.
- All drains leading directly into sewers must be closed off, and locked where possible, to prevent any unwanted products from entering sewers should an accidental spill occur. Where drains are present to drain wash water, these should only be opened during times of washing.

Mitigation:

- Waste should be disposed of regularly and at appropriately classified disposal facilities, this includes hazardous material (empty chemical containers, contaminated rugs, paper water and soil).
- See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers.
- Liaise with the municipality regarding waste and handling of hazardous waste.
- Due to the nature of some hazardous materials they, or the containers they are packed in, should be disposed of in an appropriate way at an appropriately classified waste disposal facility. See the material safety data sheets available from suppliers for disposal methods.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A register of hazardous waste disposal should be kept. This should include type of waste, volume as well as disposal method/facility.
- Any complaints received regarding waste should be recorded with notes on action taken.
- All information and reporting to be included in a bi-annual report.

10.1.11 Ecosystem and Biodiversity Impact

The nature of the operational activities is such that the probability of creating a habitat for flora and fauna to establish is low. No significant impact on the biodiversity of the area is predicted as this is an existing operation and the site is void of natural fauna and flora. Excessive lighting used at night and especially those that are directed upwards may blind birds like flamingos that fly at night. This may result in disorientation of birds and collisions with structures. Further impacts will mostly be related to pollution of the environment.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Impact on fauna and flora. Loss of biodiversity	1	-1	3	2	2	-7	-1	Improbable
Daily Operations	Impact on fauna and flora. Loss of biodiversity	2	-1	3	2	2	-14	-2	Probable

Desired Outcome: To avoid pollution of and impacts on the ecological environment.

Actions.

Mitigation:

- Report any extraordinary ecological sightings to the Ministry of Environment, Forestry and Tourism.
- Mitigation measures related to waste handling and the prevention of groundwater, surface water and soil contamination should limit ecosystem and biodiversity impacts.
- Avoid scavenging of waste by fauna.
- The establishment of habitats and nesting sites at the facility should be avoided where possible.
- Lights used at night should be kept to a minimum and should be directed downwards to the working surfaces.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- All information of extraordinary ecological sightings to be included in a bi-annual report.

10.1.12 Groundwater, Surface Water and Soil Contamination

Potential sources of groundwater, surface water or soil pollution include spilled fuel, oil or hydraulic fluid from trucks and machinery. In an event of groundwater contamination, the shallow groundwater may lead to a rapid lateral spread of pollutants. This will further have potential impacts on underground utilities and may negatively impact neighbouring properties.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Contamination from spillages and hydrocarbon leakages	2	-1	2	2	1	-10	-2	Probable
Daily Operations	Contamination from spillages and hydrocarbon leakages	2	-1	2	2	1	-10	-2	Probable

Desired Outcome: To prevent the contamination of water and soil.

Actions

Prevention:

- All handling and storage of hazardous substances should be conducted on spill proof surfaces provided for this purpose. E.g. Concrete slabs with regularly maintained seals between slabs.
- The procedures followed to prevent environmental damage during service and maintenance, and compliance with these procedures, must be audited and corrections made where necessary.
- Proper training of on-site personnel must be conducted on a regular basis (handling of hazardous substances, spill detection, spill control).

Mitigation:

- Spill clean-up means must be readily available on site as per the relevant MSDS.
- Any spill must be cleaned up immediately.
- All hazardous waste, such as contaminated materials, hydrocarbons and empty chemical containers should be disposed of at a suitably classified hazardous waste disposal facility.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A report should be compiled bi-annually of all spills or leakages. The report should contain the following information: date and duration of spill, product spilled, volume of spill, remedial action taken, comparison of pre-exposure baseline data (previous pollution conditions survey results) with post remediation data (e.g. soil/groundwater hydrocarbon concentrations).

10.1.13 Visual Impact

This is an impact that not only affects the aesthetic appearance, but also the integrity of the facility. The site is within an area zoned for light industrial use. The development of the site is in line with the urban character and has increased the aesthetics of the site by utilising a partially constructed building to construct the warehouse.

Operations will be kept tidy and neat which will promote effectiveness and pollution prevention while being aesthetically pleasing.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Construction	Aesthetic appearance and integrity of the site	1	-1	2	2	2	-6	-1	Probable
Daily Operations	Aesthetic appearance and integrity of the site	1	1	2	2	2	6	1	Definite

Desired Outcome: To minimise aesthetic impacts associated with the facility.

Actions

Mitigation:

- Regular waste disposal, good housekeeping and routine maintenance on infrastructure will ensure that the longevity of structures are maximised and a low visual impact is maintained.
- All structures and infrastructures constructed on site should be line with the visual character of the landscape as far as practically possible.

Responsible Body:

- Proponent
- Contractors

Data Sources and Monitoring:

- A bi-annual report should be compiled of all complaints received and actions taken.

10.1.14 Cumulative Impact

Possible cumulative impacts associated with the operational phase include increase in traffic frequenting the site. This will have a cumulative impact on traffic flow on surrounding streets.

The increase of traffic and other noise generating activities in the area may further increase the noise impacts on nearby receptors, the facility is however situated in a light industrial area. The cumulative effect of lighting on birds due to various industrial related developments may also increase the risk of collisions and interference with bird flight paths at night.

Project Activity / Resource	Nature (Status)	(A1) Importance	(A2) Magnitude	(B1) Permanence	(B2) Reversibility	(B3) Cumulative	Environmental Classification	Class Value	Probability
Daily Operations	The build-up of minor impacts to become more significant	2	-1	2	2	2	-12	-2	Probable

Desired Outcome: To minimise all cumulative impacts associated with the facility.

Actions

Mitigation:

- Addressing each of the individual impacts as discussed and recommended in the EMP would reduce the cumulative impact.
- Reviewing biannual and annual reports for any new or re-occurring impacts or problems would aid in identifying cumulative impacts and help in planning if the existing mitigations are insufficient.

Responsible Body:

- Proponent

Data Sources and Monitoring:

- Annual summary report based on all other impacts must be created to give an overall assessment of the impact of the operational phase.

10.2 DECOMMISSIONING AND REHABILITATION

Decommissioning is not foreseen during the validity of the environmental clearance certificate. Decommissioning was however assessed as construction activities include modification and decommissioning. Should decommissioning occur at any stage, rehabilitation of the area may be required. Decommissioning will entail the complete removal of all infrastructure including buildings and underground infrastructure not forming part of post decommissioning use. Any pollution present on the site must be remediated. The impacts associated with this phase include noise and waste production as structures are dismantled. Noise must be kept within WHO standards and waste should be contained and disposed of at an appropriately classified and approved waste facility and not dumped in the surrounding areas. Future land use after decommissioning should be assessed prior to decommissioning and rehabilitation initiated if the land would not be used for future purposes. The EMP for the facility will have to be reviewed at the time of decommissioning to cater for changes made to the site and implement guidelines and mitigation measures.

10.3 ENVIRONMENTAL MANAGEMENT SYSTEM

The proponent could implement an Environmental Management System (EMS) for their operations. An EMS is an internationally recognized and certified management system that will ensure ongoing incorporation of environmental constraints. At the heart of an EMS is the concept of continual improvement of environmental performance with resulting increases in operational efficiency, financial savings and reduction in environmental, health and safety risks. An effective EMS would need to include the following elements:

- A stated environmental policy which sets the desired level of environmental performance;
- An environmental legal register;
- An institutional structure which sets out the responsibility, authority, lines of communication and resources needed to implement the EMS;
- Identification of environmental, safety and health training needs;
- An environmental program(s) stipulating environmental objectives and targets to be met, and work instructions and controls to be applied in order to achieve compliance with the environmental policy;
- Periodic (internal and external) audits and reviews of environmental performance and the effectiveness of the EMS; and
- The Environmental Management Plan

11 CONCLUSION

The operations of the Reload Logistics will have a positive impact on the economy of Walvis Bay and Namibia as a whole. Employment will be provided to the local workforce and training and kills transfer will take place. Various business will be supported along the different transport routes. The Port of Walvis Bay will render port services for exports and this will contribute to the national treasury. The facility will further create an important hub to ensure the safe transport of goods through Namibia and SADC.

Regulations related to the handling and transport of the products, and prescribed by Namibian law, must be followed during the planning and operations of the project. The necessary permits and approvals must be obtained from the relevant ministries and authorities, where applicable. Noise pollution should at all times meet the prescribed WHO requirements to prevent hearing loss and minimise nuisance. Fire prevention should be adequate, and health and safety regulations should be adhered to in accordance with the regulations pertaining to relevant laws and internationally accepted standards of operation. Any waste produced must be removed from site and disposed of at an appropriate facility or re-used or recycled where possible. Hazardous waste must be disposed of at an approved hazardous waste disposal site.

The EMP (Section 10) should be used as an on-site reference document for the operations of the facility. Parties responsible for transgressing of the EMP should be held responsible for any rehabilitation that may need to be undertaken. The proponent could use an in-house Health, Safety, Security and

Environment Management System in conjunction with the EMP. All operational personnel must be taught the contents of these documents.

Table 11-1. Impact summary class values prior to mitigation

Impact Category	Impact Type	Construction	Operations
	Positive Rating Scale: Maximum Value	5	5
	Negative Rating Scale: Maximum Value	-5	-5
EO	Skills, Technology and Development	2	3
EO	Revenue Generation and Employment	2	3
SC	Demographic Profile and Community Health	-1	-2
SC	Traffic	-1	-2
SC	Health, Safety and Security	-2	-3
PC	Fire and Explosion	-3	-3
PC	Noise	-2	-2
PC/BE	Dust and Air Quality	-2	-2
PC	Waste Production	-2	-2
BE	Ecosystem and Biodiversity Impact	-1	-2
PC/BE	Groundwater, Surface Water and Soil Contamination	-2	-2
SC	Visual Impact	-1	-1
PC	Cumulative Impact		-2

BE = Biological/Ecological EO = Economical/Operational PC = Physical/Chemical SC = Sociological/Cultural

12 REFERENCES

Atlas of Namibia Project. 2002. Directorate of Environmental Affairs, Ministry of Environment and Tourism (www.met.gov.na). [Accessed from http://www.unikoeln. de/sfb389/e/e1/download/atlas_namibia/index_e.htm]

Bryant R. 2010. Characterising the Wind Regime of Sand Seas: Data Sources and Scaling Issues. Global Sand Seas: Past Present and Future. Working Group Conference: Royal Geographical Society in London.

Callaghan B. 1991. Atmospheric corrosion testing in Southern Africa – results of a twenty-year national programme. Nickel Development Institute. http://www.nickelinstitute.org/~/Media/Files/TechnicalLiterature/ StainlessSteelsinABC_GuidelinesforCorrosionPrevention_11024_.pdf Accessed 08/05/2013

Corbett I. 2018. The Influence of the Benguela Low-Level Coastal Jet on the Architecture and Dynamics of Aeolian Transport Corridors in the Sperrgebiet, Namibia. Unpublished Report. https://pdfs.semanticscholar.org/a036/eb86ca35ceee1f19198d2735c93d36f9ac35.pdf?_ga=2.153 498104.1710554377.1586180758-213198396.1586180758 Accessed on 7 April 2020

http://www.meteoweb.eu/2012/11/litcz-scivola-a-sud-dellequatore-nellafrica-australe-prende-vita-la-stazione-delle-piogge-levoluzione-per-i-prossimi-mesi/166037/ accessed 8 April 2020

https://www.windfinder.com/windstatistics/walvis_bay_airport accessed 8 April 2020

Mendelsohn J, Jarvis A, Roberts C, Robertson T. 2002. Atlas of Namibia: A Portrait of the Land and its People. David Philip Publishers, Cape Town.

Namibia Statistics Agency. Namibia household Income and Expenditure Survey 2009/2010.

Namibia Statistics Agency. Namibia 2011 Population and Housing Census Main Report.

Pastakia, C.M.R.; 1998; The Rapid Impact Assessment Matrix (RIAM) – A new tool for Environmental Impact Assessment.

Patricola C, Chang P. 2017. Structure and dynamics of the Benguela low-level coastal jet. Climate Dynamics 49: 2765–2788.

Petzer, G. & von Gruenewaldt, R., 20092008. Air Quality Specialist Assessment for the Proposed Paratus Power Plant Extension in Walvis Bay, Midrand: Airshed Planning Professionals.

Taljaard JJ and Schumann TEW. 1940. Upper air temperatures and humidities at Walvis Bay, South West Africa. Bulletin of the American Meteorological Society 21: 293 – 296.

uMoya-NILU (2020): Air Quality Specialist Study for the EIA and Clearance for the NamPower Firm Power Project in Walvis Bay, Namibia, Report No. uMN059-2020, 17 March 2020.

Appendix A: Proof of Public Consultation

Notified IAPs

Name	Position	Organisation
Lovisa Haulaula	Environmental Officer	Municipality of Walvis Bay
David Uushona	Manager: SWEM	Municipality of Walvis Bay
Nangula Amutenya	Environmental Coordinator	Municipality of Walvis Bay
E. Nambahu	Twon Planning	Municipality of Walvis Bay
E. Van Wyk	Neighbour	Jan Japan Motors
A. Sada	Neighbour	Hi-Step Hydraulics
A.F. van der Merwe	Neighbour	Roads Authority
L. Coetzer	Secretary of the Mayor	Municipality of Walvis Bay
C. Mcnab	Neighbour	Dunes Mall
C. Schalkwyk	Neighbour	Bachmus Oil and Fuel Supplies
Yolanda	Neighbour	Argon Investments (Ramos Real Estate)
R. Simushi	Neighbour	A. van der Walt Transport

Municipality of Walvis Bay Meeting Attendance Register

Name	Organisation	Position
Lovisa Haulaula	Municipality of Walvis Bay	Environmental Officer
Ephraim Nambahu	Municipality of Walvis Bay	Town Planning
Wikus Coetzer	Geo Pollution Technologies	EAP

Registered IAPs

Name	Organisation
Lovisa Haulaula	Municipality of Walvis Bay
Ephraim Nambahu	Municipality of Walvis Bay

IAPs Notified by Hand Delivered Letter

Public Participation Notification: Environmental Assessment for Reload Logistics, in Walvis Bay

Name & Surname	Organisation/Address	Tel / Mobile	Email	Signature
Esmeralda Van Wyk	Rossing Road Jan Japan Motors CC	Privacy Block		
Alfred Sacky				
Russel Simushi	A.V.D WALT Transport			
A F v/d Merwe	Roads Authority			
Lelanie Coetzee	Municipality of WB			
Chrisko Mcndh	Dunes Mall.			

Geo Pollution Technologies
Reload Logistics Walvis Bay

September 2021

Notification Letter

TEL.: (+264-61) 257411 ♦ FAX.: (+264) 88626368
CELL.: (+264-81) 1220082
PO BOX 11073 ♦ WINDHOEK ♦ NAMIBIA
E-MAIL: gpt@thenamib.com

To: **Interested and Affected Parties** **September 2021**

Re: **Environmental Scoping Assessment and Environmental Management Plan for the Operations of Reload Logistics Namibia on erf 5739, Walvis Bay**

Dear Sir/Madam

In terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (Government Notice No 30 of 2012), notice is hereby given to all potential interested and/or affected parties that an application will be made to the Environmental Commissioner for an environmental clearance certificate for the following project:

Project: Environmental Scoping Assessment and Environmental Management Plan for the Operations of Reload Logistics Namibia on erf 5739, Walvis Bay

Proponent: Reload Logistics Namibia (Pty) Ltd

Environmental Assessment Practitioner: Geo Pollution Technologies (Pty) Ltd

Reload Logistics Namibia operates a warehouse for the receipt, storage and packaging of copper cathodes, copper concentrates and chemicals in Walvis Bay. Copper products arrive from mines in southern Africa and is exported to international clients. While imported chemicals, used in the mining sector, arrive via the Port of Walvis Bay, from where it is distributed. The warehouse is situated on erf 5739, Rössing Street, in the new light industrial area of Walvis Bay (Figure 1).

Geo Pollution Technologies (Pty) Ltd was appointed by the proponent to conduct an environmental assessment for the facility. As part of the assessment we consult with interested and affected parties (IAPs). All IAPs are invited to register with the environmental consultant to receive further documentation and communication regarding the project. By registering, IAPs will be provided with an opportunity to offer input that will be considered in the drafting of the environmental assessment report and its associated management plan.

Please register as an IAP and provide comments by **04 October 2021**.

To register, please contact:
Email: **rln@thenamib.com**
Fax: 088-62-6368

Should you require any additional information please contact Geo Pollution Technologies at telephone 061-257411.

Thank you in advance.

Sincerely,
Geo Pollution Technologies

André Faul
Environmental Assessment Practitioner

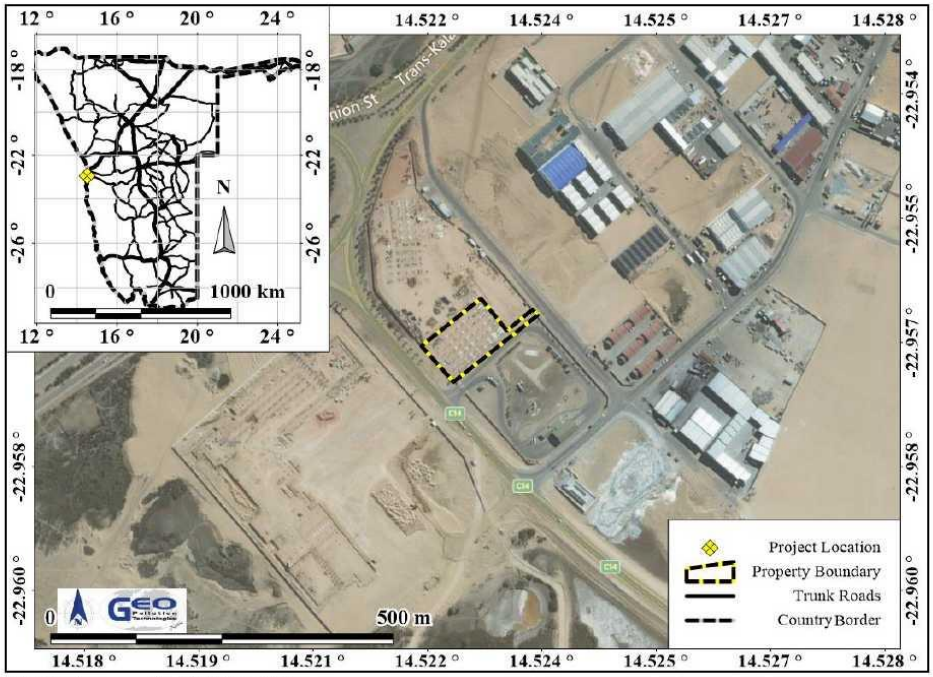

Figure 1. Project location

Municipal Notification

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Thank you in advance.

Sincerely,
Geo Pollution Technologies

André Faul
Environmental Assessment Practitioner

MUNICIPALITY OF WALVIS BAY
Office of the Mayor
2021 -09- 27
Received
PRIVATE BAG 5017 TEL: 064 2013111

Municipal Meeting Attendance Register

MEETING ATTENDANCE LIST

Project: Reload Logistics - EIA & EMP, Walvis Bay

Name & Surname	Organisation	Position	Tell/Cell Nr.	Fax Nr.	Email
W. Coetzer	GPT	Environmentalist.	0811 452 164	—	wikus@thenamib.com
L. Hailaula	WBM	Environmental Officer	064-214306	064-214310	lhailaula@walvisbaycc.org.na
E. NAMBAHU	WMWB	TOWN PLANNING	064-2013229	064-206135	enambahu@walvisbaycc.org.na

Venue: Walvis Bay Municipality, WWE **Time:** 09H30 **Date:** 07/10/2021

Press Notice: The Namibian Sun 13 and 20 September 2021

Sun
MONDAY 13 SEPTEMBER 2021 | NEWS | 3

HAINDAKA EYES THE THRONE

JEMIMA BEUKES
WINDHOEK

Telecommunications giant MTC will spend N$4.2 million to employ 100 people for four months to help it get its Initial Public Offering (IPO) process going, as well as to alleviating the increasing unemployment rate in the country.

This announcement comes as relief at a time when the rampant scourge of Covid-19 continues to devastate the economy.

The 100 ambassadors will be trained and tasked to do public education on MTC's listing process, which started last week, and will also spearhead the much-anticipated public offer through which investors can apply for shares.

This process will begin on 20 September and close on 1 November.

Work experience

Tim Ekandjo, the company's chief human capital and corporate affairs manager, emphasised the company's commitment to job creation and youth development.

"Although these jobs are temporary, for only four months, it gives these young people valuable work experience that they can use to bolster their CVs and an opportunity to create a relationship with MTC for consideration when job openings occur in the future.

"In addition to the many job opportunities we continue to create through the MTC Namibia National Internship Programme, we are indeed happy to create over 100 new jobs as part of the listing process. "These jobs are unfortunately not permanent as they will provide relief and assistance during this hectic IPO process where more hands will be required on deck," he said.

MTC has since 2019 offered opportunities to 407 interns through its internship programme and has committed to placing 160 interns per annum, with a monthly allowance of N$3 000.

scribed IPC's actions as "complete rubbish", said he will not apologise, and added that under common law, political parties cannot sue an individual.

"There will be no apology. I will ignore their lawyer with impunity. It is complete rubbish," he

IPC gave Ta Ngolotoa until 17:00 on Wednesday to make a retraction on the platforms where he made the comments. Failing to do so, IPC threatened to take legal action and will demand for N$500 000 for allegedly tarnishing the image

vehemently pursue, re-

the audio recording, u-

kenya@namibiansun.com

PUBLIC PARTICIPATION NOTICE
ENVIRONMENTAL ASSESSMENT AND MANAGEMENT PLAN FOR THE OPERATIONS OF RELOAD LOGISTICS NAMIBIA ON ERF 5739, WALVIS BAY

Geo Pollution Technologies (Pty) Ltd was appointed by **Reload Logistics Namibia (Pty) Ltd** to undertake an environmental assessment for the operations of a warehouse for the receipt, storage and packaging of copper cathodes, copper concentrates and chemicals in Walvis Bay. Copper products arrive from mines in southern Africa and is exported to international clients. While imported chemicals, used in the mining sector, arrive via the Port of Walvis Bay, from where it is distributed. The warehouse is situated on erf 5739, Rössing Street, in the new light industrial area of Walvis Bay. The environmental assessment will be according to the Environmental Management Act of 2007 and its regulations as published in 2012. More information is available at:

http://www.thenamib.com/projects/projects.html

All interested and affected parties are invited to register with the environmental consultant. By registering you are provided with the opportunity to share any comments, issues or concerns related to the facility, for consideration in the environmental assessment. Additional information can be requested from Geo Pollution Technologies.

All comments and concerns should be submitted to Geo Pollution Technologies by **27 September 2021.**

André Faul
Geo Pollution Technologies
Telephone: +264-61-257411
Fax: +264-88626368
E-Mail: rln@thenamib.com

OSHAKATI TOWN COUNCIL
Tel: +264 65 229500
Fax: +264 65 220435
906 Sam Nujoma Road
Private Bag 5530
OSHAKATI

PUBLIC NOTICE

INTERIM VALUATION OF ALL RATEABLE PROPERTIES WITHIN THE LOCAL AUTHORITY AREA OF OSHAKATI

Oshakati Town Council in accordance with Section 67 of the Local Authorities Act, 1992 (Act 23 of 1992) as amended, hereby informs all the residents that Seeds Property Solutions cc has been appointed to conduct the Interim Valuation of all rateable properties improved within its area of jurisdiction.

In terms of Section 67 (4) (a) of the Local Authorities Act, 1992 (Act 23 of 1992) as amended, and subject to the provision of paragraph (b) it states that, a Valuer shall, for the purpose of the valuation of any rateable property in terms of this Act, have the power to enter any property at any reasonable time and after having given the owner, occupier or the person in control of such property prior notice as may in the circumstances reasonable.

(b) When a valuer exercise or performs a power, duty and function in terms of this Act in the presence of any person affected thereby, he or she shall on demand by any such person produce to him or her the certificate issued to him or her in terms of subsection (3) (c).

(c) The owner, occupier or any other person in charge of any such property shall at all times furnish such facilities and information as are reasonably required by a Valuer in order to enable him or her to exercise or perform his or her powers, duties and functions in terms of this Act.

In terms of Section 67 (6), any person who hinders or obstructs any valuer in this exercise or performance of his or her powers, duties and functions shall be guilty of an offence and on conviction liable to a fine not exceeding R2000 or to imprisonment for a period not exceeding six months or both such fine and such imprisonment.

In order to complete this process, the Consultant might need to do the job after normal working hours and during weekends. Therefore, please accord them all the necessary assistance that they might require from you. The valuation is expected to start from 21st September 2021.

Chief Executive Officer
Oshakati Town Council
Private Bag 5530
Oshakati
065-229500

RUNDU

case, if ever it reaches the

suggestions and state-

Sun
MONDAY 20 SEPTEMBER 2021 | NEWS | 3

SEED PRODUCTION GETS INTO HIGH GEAR

Namibia was one of the countries involved in the establishment of IDEA in 1995, along with South Africa, India, the Netherlands, Australia, Belgium, Barbados, Chile, Costa Rica, Norway, Portugal, Spain and Sweden.

OWN FEET: Notemba Tjipueja, ECN chairperson until last week. PHOTO: FILE

Political analyst Dr André du Pisanie of the University of Namibia said he could not

one was caused by a spark from a grader that was used for grading firebreaks in the eastern part of the park.
"The fire from the neighbouring farm has been burning in an area which we already burnt as part of our early burning programme, therefore not causing much threat," said Muyunda.
He said the fire on the eastern side started on Thursday and a team was on the ground to stop this fire, as it was heading to areas they do not want to burn at the moment. "Be assured that this is receiving our immediate and urgent attention," Muyunda said.
PHOTO: WILFRIED HÄHNER

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Fax: +264-88626368
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NKURENKURU TOWN COUNCIL

BID INVITATION

CONSTRUCTION OF MUNICIPAL SERVICES (LOW VOLTAGE ELECTRICAL SERVICES) FOR NKURENKURU EXTENSION 3: PHASE 4

TENDER NUMBER:	W/ONB/NKU-002/08/2021
TITLE	CONSTRUCTION OF MUNICIPAL SERVICES (LOW VOLTAGE ELECTRICAL SERVICES) FOR NKURENKURU EXTENSION 3: PHASE 4
DESCRIPTION	The bid covers all the Phase 4 works required for the construction of low voltage electrical services in Nkurenkuru Extension 3.
SITE INSPECTION	A non-compulsory site inspection will be held at 10h00 on Friday 24 September 2021. The meeting venue will be the Nkurenkuru Town Council.
BIDDING DOCUMENTS	Available at N$300 as from Monday 20 September 2021 at the Cashier Counter, **NKURENKURU TOWN COUNCIL** in Nkurenkuru.
DELIVERY ADDRESS FOR SUBMISSION OF TENDER	**W/ONB/NKU-002/08/2021 CONSTRUCTION OF MUNICIPAL SERVICES (LOW VOLTAGE ELECTRICAL SERVICES) FOR NKURENKURU EXTENSION 3: PHASE 4** Bid Box Nkurenkuru Town Council Nkurenkuru
CLOSING TIME AND DATE	Bids must be submitted at the address above before **12:00 on Wednesday 20 October 2021**
For Enquiries contact	**Engineer** Mr. Antonio de Jesus (Technical) DEKA Consulting Engineers Tel: 061220959 Fax: 066220992 Email: antonio@dekaconsult.com **Head of Procurement Management Unit** Mrs. E.M. Nanyemba Nkurenkuru Town Council Tel: 066258089 Fax: 066258091 Email: Email: enanyemba@nkurenkurutc.com.na

NB: Preference will be given to qualify locally based (Kavango West Region) contractors in accordance with Ministry of Finance's directive issued on the 14th of December 2020.

2022/2023 financial year at the Omaf

for 10 days for threshing pearl millet and

tober.

Press Notice: Die Republikein 13 and 20 September 2021

4 NUUS | Republikein | Maandag 13 September 2021

Die FFW het gesê die regering se

komstig gereguleer word".

Vrywilligers deel kos uit aan pasiënte

Stadig maar seker het die sken- … tere doekies en klere uitgedeel. … by 081 368 9189."

PUBLIC PARTICIPATION NOTICE
ENVIRONMENTAL ASSESSMENT AND MANAGEMENT PLAN FOR THE OPERATIONS OF RELOAD LOGISTICS NAMIBIA ON ERF 5739, WALVIS BAY

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Fax: +264-88626368
E-Mail: rln@thenamib.com

Mee. Jacki Detlof-Wismer, raadslid Claus Goldbeck en Louisa Kavita die burgemeester van Swakopmund, wat al verskeie kere saam was om die kos en klere uit te deel. FOTO'S VERSKAF

Klere vir minderbevoorregtes

4 NUUS | Republikein | Maandag 20 September 2021

Nuwe stelsel geïmplementeer

die vorige jaar se eindtotaal en die betrokke boekjaar se beginsyfers.

'n Verskil van meer as N$3 miljoen, tussen die regering se subsidie van N$11 miljoen en die dorpsraad se boekhouding van N$7,8 miljoen, is ook uitgewys.

openbare sektor (IPSAS) reggestel.

"Die raad het die nuwe verslaggewingsraamwerk, IPSAS, geïmplementeer en ver gevorder met die voldoening daaraan.

"Die raad het verder IPSAS 33 aangeneem, wat 'n drie jaar aanpas-

se omstandighede en na noukeurig oorweging word waterverwante tariewe nie vir die boekjaar 2021-'22 verhoog nie', haal die vrystelling mnr. Guamé Stephanus, voorsitter van die dorpsraad se bestuurskomitee, aan. - augetto@republikein.com.na

signeldseenheid van Namwater; en Matyayi is die uitvoerende hoof van die Otjiwarongo-munisipaliteit.

'n Kortlys met vyf kandidate vir die pos vir die strategiese uitvoerende beampte: ekonomiese ontwikkeling en gemeenskapsdiens is ook aange-

man Endjala.

Altesaam 52 aansoeke is vir die pos strategiese uitvoerende beampte: inligting en kommunikasietegnologie ontvang waarvan 16 aan die vereistes voldoen het. Dié kortlys sal binnekort bekendgemaak word.

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Fax: +264-88626368
E-Mail: rln@thenamib.com

NUWE KOMMISSARISSE VAN ECN VERWELKOM

Die regterpresident en adjunkhoofregter van Namibië, regter Petrus Damaseb, het Woensdag twee kommissarisse van die Verkiesingskommissie van Namibië (ECN) in die Windhoekse hoërhof ingesweer. Dr. Emmerentia Leonard en me. Elsie Nghikembua het saam die eed en bevestiging in die hofsaal afgelê. Dit maak hulle, soos vervat in artikel 17 van die Grondwet, die mees prominente bewakers van stemreg in die land. FOTO'S KRISTIEN KRUGER

Site Notice


PUBLIC NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND MANAGEMENT PLAN FOR THE OPERATIONS OF RELOAD LOGISTICS NAMIBIA ON ERF 5739, WALVIS BAY
In terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (Government Notice No 30 of 2012), notice is hereby given to all potential interested and affected parties that an application will be made to the environmental commissioner for an environmental clearance certificate for the following:
Project: Environmental Scoping Assessment and Environmental Management Plan for the Operations of Reload Logistics Namibia on erf 5739, Walvis Bay
Proponent: Reload Logistics Namibia (Pty) Ltd
Reload Logistics Namibia operates a warehouse for the receipt, storage and packaging of copper cathodes, copper concentrates and chemicals in Walvis Bay. Copper products arrive from mines in southern Africa and is exported to international clients. While imported chemicals, used in the mining sector, arrive via the Port of Walvis Bay, from where it is distributed. The warehouse is situated on erf 5739, Rössing Street, in the new light industrial area of Walvis Bay.
Geo Pollution Technologies (Pty) Ltd was appointed by the proponent to conduct an environmental assessment for the project. As part of the assessment we consult with interested and affected parties. You are hereby invited to register as an interested and affected party with Geo Pollution Technologies. Registration provides you with an opportunity to submit comments, issues or concerns related to the facility, for consideration in the environmental assessment. Please send your written registration or comments to:
Fax: 088-62-6368 email: rln@thenamib.com
Should you require any additional information please contact Geo Pollution Technologies at 061-257411. Registration and comments should reach us by 04 October 2021.
Thank you in advance.
Geo Pollution Technologies

Appendix B: Consultants' Curriculum Vitae

ENVIRONMENTAL SCIENTIST **André Faul**

André entered the environmental assessment profession at the beginning of 2013 and since then has worked on more than 150 Environmental Impact Assessments including assessments of the petroleum industry, harbour expansions, irrigation schemes, township establishment and power generation and transmission. André's post graduate studies focussed on zoological and ecological sciences and he holds a M.Sc. in Conservation Ecology and a Ph.D. in Medical Bioscience. His expertise is in ecotoxicological related studies focussing specifically on endocrine disrupting chemicals. His Ph.D. thesis title was The Assessment of Namibian Water Resources for Endocrine Disruptors. Before joining the environmental assessment profession he worked for 12 years in the Environmental Section of the Department of Biological Sciences at the University of Namibia, first as laboratory technician and then as lecturer in biological and ecological sciences.

CURRICULUM VITAE ANDRÉ FAUL

Name of Firm	:	Geo Pollution Technologies (Pty) Ltd.
Name of Staff	:	ANDRÉ FAUL
Profession	:	Environmental Scientist
Years' Experience	:	20
Nationality	:	Namibian
Position	:	Environmental Scientist
Specialisation	:	Environmental Toxicology
Languages	:	Afrikaans – speaking, reading, writing – excellent
		English – speaking, reading, writing – excellent

EDUCATION AND PROFESSIONAL STATUS:

B.Sc. Zoology	:	University of Stellenbosch, 1999
B.Sc. (Hons.) Zoology	:	University of Stellenbosch, 2000
M.Sc. (Conservation Ecology)	:	University of Stellenbosch, 2005
Ph.D. (Medical Bioscience)	:	University of the Western Cape, 2018

First Aid Class A	EMTSS, 2017
Basic Fire Fighting	EMTSS, 2017

PROFESSIONAL SOCIETY AFFILIATION:

Environmental Assessment Professionals of Namibia (Practitioner and Executive Committee Member)

AREAS OF EXPERTISE:

Knowledge and expertise in:

- Water Sampling, Extractions and Analysis
- Biomonitoring and Bioassays
- Biodiversity Assessment
- Toxicology
- Restoration Ecology

EMPLOYMENT:

2013-Date	:	Geo Pollution Technologies – Environmental Scientist
2005-2012	:	Lecturer, University of Namibia
2001-2004	:	Laboratory Technician, University of Namibia

PUBLICATIONS:

Publications:	5
Contract Reports	+150
Research Reports & Manuals:	5
Conference Presentations:	1

ENVIRONMENTAL GEOLOGIST **Wikus Coetzer**

Wikus has 6 years' experience in environmental science related fields with 4 years' experience in conducting environmental impact assessments and preparation of environmental management plans. He holds an honours degree in Environmental Sciences – Environmental Geology from the Northwest-University Potchefstroom (NWU) South Africa. He first completed a B.Sc. degree in Geology and Botany in the required time also from the Northwest University Potchefstroom, South Africa. His honours project focused on the rehabilitation and phytoremediation of various tailings types and soils.

He has working experience as an environmental monitor / assisting environmental officer at Petra Diamonds, Cullinan Diamond Mine (CDM) where he gained a proper understanding of environmental monitoring responsibilities as well as legislations, regulations and the implementation of EMS/ISO14001. He started working at Geo Pollution Technologies in 2017, and regularly conducts/assists and report on environmental impact assessments, environmental management plans and pollution surveys.

CURRICULUM VITAE WIKUS COETZER

Name of Firm	:	Geo Pollution Technologies (Pty) Ltd.
Name of Staff	:	WIKUS COETZER
Profession	:	Environmental Geologist
Nationality	:	South African
Position	:	Environmental Geologist
Specialisation	:	Environmental Geology/ Geochemistry
Languages	:	Afrikaans – speaking, reading, writing
		English – speaking, reading, writing

EDUCATION AND PROFESSIONAL STATUS:

B.Sc. Environmental and Biological Sciences – Geology & Botany	: NWU Potchefstroom 2013
B.Sc. (Hons.) Environmental Sciences – Environmental Geology	: NWU Potchefstroom 2014

First Aid Class A	EMTSS, 2017
Basic Fire Fighting	EMTSS, 2017

AREAS OF EXPERTISE:

Knowledge and expertise in:

- Phytoremediation
- Environmental Geology / Geochemistry
- Environmental Monitoring
- Environmental Compliance
- Environmental Impact Assessments
- Environmental Management Plans

EMPLOYMENT:

2017 - Date:	Geo Pollution Technologies
2015 - 2016:	Petra Diamonds CDM – Environmental monitor / Assisting environmental officer
2015:	Petra Diamonds CDM – Graduate program: Environmental Officer
2014:	NWU Potchefstroom department of Geo and Spatial Sciences – Research assistant

PUBLICATIONS:

Contract Reports: +40