ENVIRONMENTAL MANAGEMENT PLAN

Proposed Temporary (Six Month or less) Extraction (Scrubbing-off) Dune Sand Removal at Lüderitz, Haulage and Utilization as Substrate for Irrigation Pipeline Stabilization at the Naute Dam, ||Karas Region

FEBRUARY 20

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

Mobile: +264 81 129 7551

Authored by: Mr. Lawrence Tjatindi

ENVIROLEAP CONSULTING cc
...a leap towards better environmental compliance
Enviro Leap Consulting cc
P. O. Box 25874, Windhoek
+264 81 486 9948
eap.trigen@gmail.com

DOCUMENT INFORMATION AND APPROVAL		
Title	Proposed Temporary (Six Month or less) Extraction (Scrubbing-off) Dune Sand Removal at Lüderitz, Haulage and Utilization as Substrate for Irrigation Pipeline Stabilization on Farm Skaapplaas No. 414 North of Naute Dam in Keetmanshoop District, ǁKaras Region	
ECC Application Reference number	APP-006564	
Location	Extraction at Lüderitz and Utilization at Naute Dam	
Proponent	The Director TradePort Namibia (Pty) Ltd P. O. Box 22458, Windhoek Mr. Monty Ndjavera Mobile: +264 81 129 7551	
Author:	**Signature**	**Date**
Mr. Lawrence Tjatindi (EAP) 1		22 November 2025
Approval – Proponent		
Mr. Monty Ndjavera (Director, Proponent)		24 November 2025

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1 INTRODUCTION

1.1 General Introduction

TradePort Namibia (Pty) Ltd (herein referred to as the proponent) is a registered Namibian company, which ventures in the import-export trading operations that mainly entails the transportation, handling and storage of fuel and mineral ore. Currently, TradePort Namibia maintains operations (fleet of trucks and skips, warehouse and a transhipment facility) consisting of haulage and storage of up to 80 000 tons of mineral along the Trans-Oranje Corridor through Lüderitz Port (**Figure 1**).

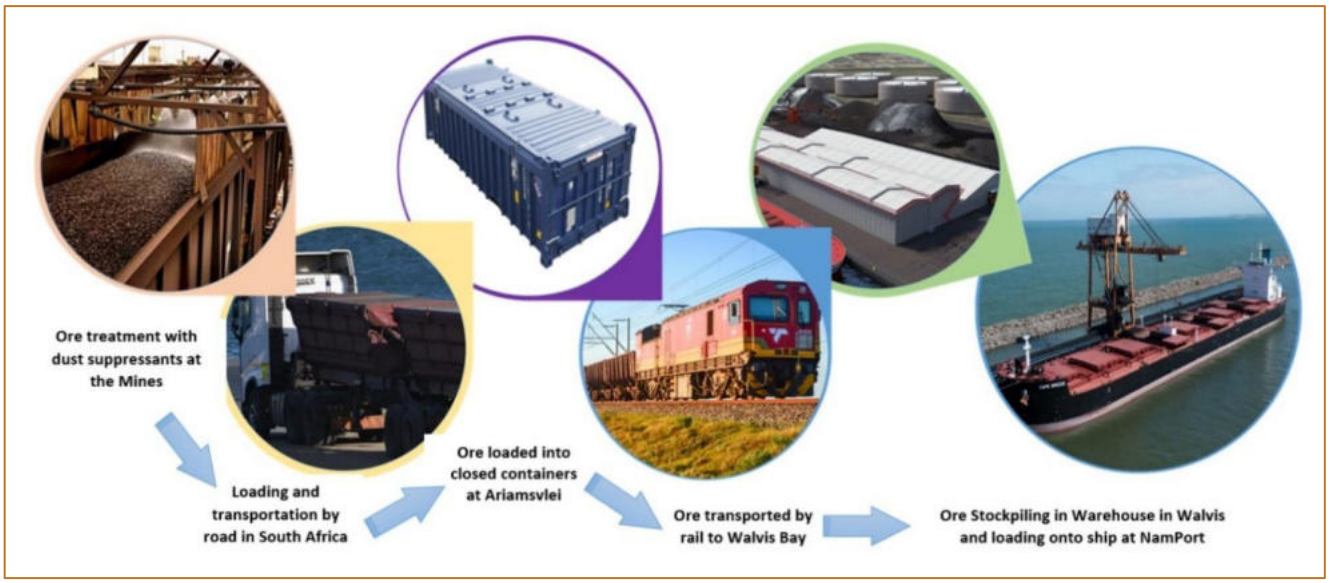

Figure 1: *The proposed project's activity flow, detailing the initial activities at the mines in South Africa to the loading of the commodity onto the ship at the Port of Lüderitz in Namibia*

Additionally, TradePort Namibia is diversifying their operation in Namibia, and has recently embarked upon and is establishing an irrigation scheme initiative at Farm Skaapplaas No. 414 North of Naute Dam in the Keetmanshoop District (**Figure 2**). The project is undertaken in collaboration with **Mandy Investments 294 (Pty) Ltd** and includes the clearing and preparation of land, approximately 1300 hectares (ha) in total, for Lucerne (animal fodder) cultivation for commercial purposes. The project land will be worked on and implemented in three phases, and these are as follows:

- Phase 1: 300 ha,
- Phase 2: a further 700 ha, and
- Phase 3: a further 300 ha (totalling 1300 ha).

The relevant environmental authorization has been already obtained for the both the import-export trading operation (**ECC 2300531**, expiring on 23 June 2026) and the irrigation scheme project (**ECC 2502184**, expiring on 07 February 2028). Critically now, and given the rocky terrain at the irrigation project, TradePort Namibia needs of soft sand to the tune of 16 000 m³ in volume (spread across 160 trucks, each carrying 20 m³ and over five trips per truck). The sand will be used as stabilizing substrate against geological activity migration of both livestock and wildlife in the area.

Figure 2: *Show the progress of the groundworks and pipeline preparation underway at Farm Skaapplaas No. 414*

2. PROJECT DESCRIPTION AND LOCATION

2.1. SITE SELECTION

The proposed site is situated about fourteen (14 km) South-east of the Lüderitz CBD and just about 2two (2 km) north-west of the Grasplatz Railway Station, along the B4 Highway connecting Keetmanshoop to the town. The site selection process took into consideration key site selection factors such as sand availability, proximity to sensitive receptors, site accessibility, topography, risks, current land use. The particular section selected, is one where environmental disturbance has already occurred and or regularly occurs given that the dune sand often encroaches onto the road and the Town Council has to grade-off the sand from the road.

Though the activity may offer a temporary solution in respect to the sand encroaching onto the road, the dune may eventually reach the road after some time, with the dune replenishing again.

Table 2: Corner coordinates of the proposed development site

Corner point	Latitude	Longitude
E – Lüderitz Sand Site Pnt. 1	-26.713621°	15.282916°
F – Lüderitz Sand Site Pnt. 2	-26.714282°	15.281812°
G – Lüderitz Sand Site Pnt. 3	-26.714579°	15.283523°
H – Lüderitz Sand Site Pnt. 4	-26.714950°	15.282854°

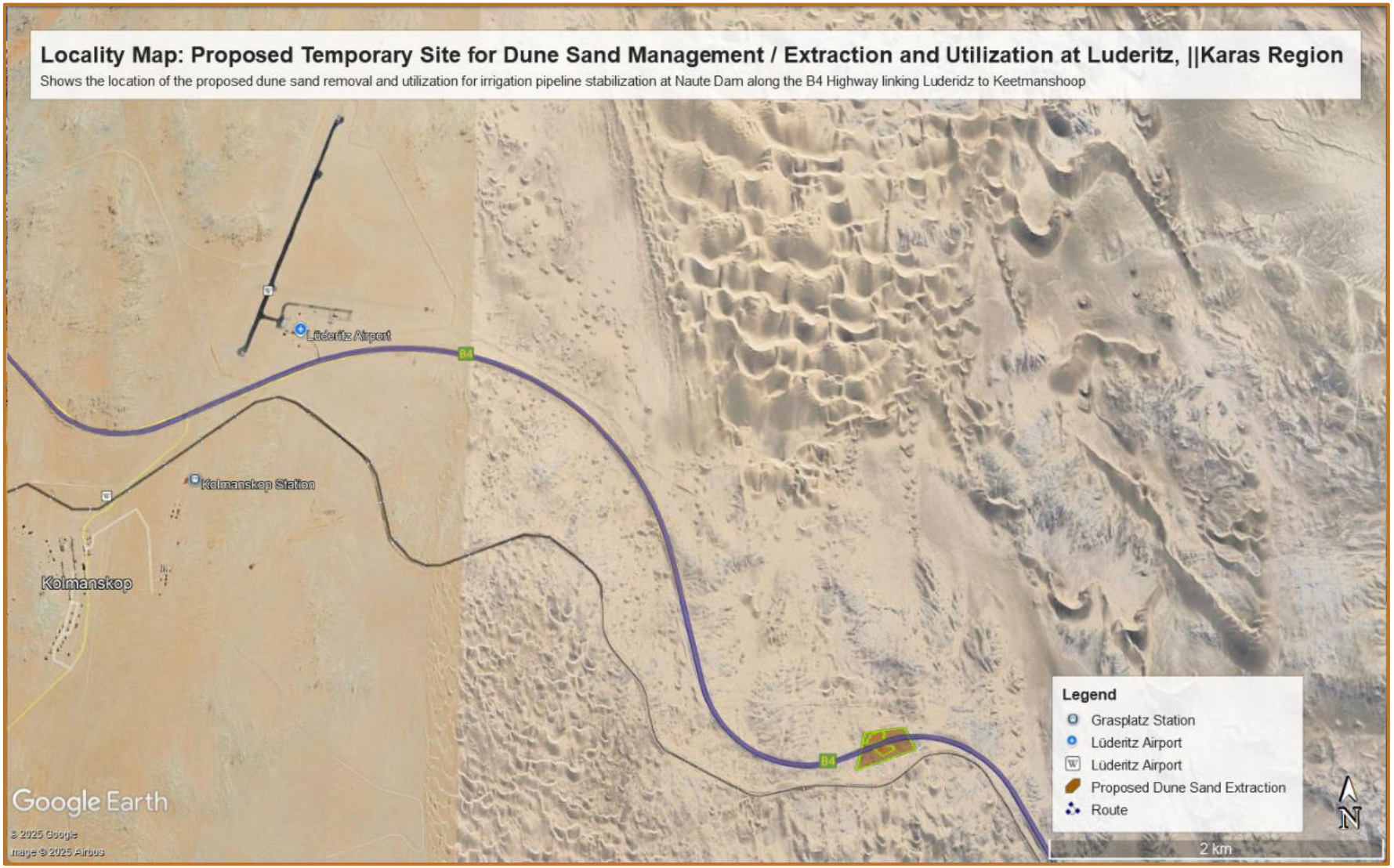

Figure 6: *Shows the Site of the Proposed Dune Sand Extraction in relation to the B4 (Highway) Road South-East of Lüderitz, ||Karas Region*

Figure 7: *Shows a close-up view of the target spots where extraction is envisaged as road maintenance activity*

3. SUMMARY OF IDENTIFIED IMPACTS

As part of the environmental scoping processes for the project, environmental aspects and potential environmental impacts associated with the activities and facilities were identified. Detailed TradePort's activities associated with the operation and decommissioning and or closure activities are described in the 2016 EIA Report and the operational phase facilities/activities are summarized in section 4 of this EMP. Table 4 provides a description of the environmental aspects that are associated with TradePort's Investment's operations and how they impact the biophysical and human environments, respectively.

Table 1: Summary of potential cumulative impacts associated with the proposed project

Section	Potential impact	Significance of the impact (the ratings are negative	
		Unmitigated	Mitigated
Groundwater Resources	Groundwater Resources	M	L
	Reduction of Aquifer Thickness	M	M
	Groundwater Quality	M	L
Biodiversity	Physical destruction of biodiversity from clearing land and placing infrastructure	H	L
	Loss of biodiversity from the loss of subsurface water resources	H	L
	General disturbance of biodiversity	H	L
Surface Water Runoff	Downstream decrease in surface water runoff	H	L
	Surface Water Quality	M	L
Air quality	Air pollution from dust and use of vehicle and diesel	L	L

4. ENVIRONMENTAL IMPACT

4.1 Overall Objectives of the EMP

The following overall environmental objectives have been set for the TradePort's Project:

- To comply with national legislation and standards for the protection of the environment.
- To limit potential impacts on biodiversity through the minimisation of the footprint (as far as practically possible) and the conservation of residual habitat within the mine area.
- To keep surrounding communities informed of farming activities through the implementation of forums for communication and constructive dialogue.
- To ensure the legal and appropriate management and disposal of general and hazardous waste, through the implementation of a strategy for the minimisation, recycling, management, temporary storage and removal of waste.
- To develop, implement and manage monitoring systems to ensure good environmental performance in respect of the following: ground and surface water, air quality, noise and vibration, biodiversity and rehabilitation.

The Management and Mitigation Plans (MMPs), listed in the table below, are applicable to all the relevant activities and facilities of the Sand Mine. (The MMPs follow in the subsequent sections).

4.2 Stakeholder Management and Mitigation

It is important that channels of communication are maintained over the life of the project for surrounding landowners, the general public members, as well as the local and traditional authorities, table 4 shows the stakeholders communication Management and Mitigation Plan.

Table 2: Actions relating to stakeholder communication

Issue	Management commitment	Phase
Understanding who the stakeholders are	Maintain and update the TradePort's stakeholder register, including stakeholders' needs and expectations. Ensure that all relevant stakeholder groups are included.	All
	A representative database would include government, employees, service providers, contractors, indigenous populations, local communities, traditional authorities, NGOs, shareholders, customers, the investment sector, community-based organizations, suppliers and the media.	All
	Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process.	All
	Record partnerships as well as their roles, responsibilities, capacity and contribution to development.	All
Liaising with interested and affected parties at all phases in the mine life	Devise and implement a stakeholder communication and engagement strategy.	All
Responsibility	TradePort Namibia's	

4.3 Topography Management and Mitigation

4.3.1 Issue: Security and safety impact

Impacts relating to the welfare, health and safety of the local communities may arise as a result of traffic, noise, air quality, pollution issues, etc. During the construction phase TradePort's may at a minimal provide job opportunities to the local community.

Hazardous excavations and infrastructure include all structures into or off which third parties and animals can collide, fall and be harmed. In the construction and decommissioning phases these hazardous excavations and infrastructure are usually temporary in nature, usually existing for a few weeks to a few months. The operational phase will present more long-term hazardous infrastructure. It is essential that safety and security measures are defined and implemented to adequately protect the mine site from being accessed by unauthorized people.

Table 3: Hazardous excavations & infrastructure - link to phase & activities

Issue	Management commitment	Phase
Hazardous excavations	All staff will be trained to attend to third parties and animals so as to avoid situations where people and animals can enter safety risk areas.	All
Safety and Security Risks	At closure, permanent warning signs will be in place at appropriate intervals, in appropriate languages with danger pictures to warn people of any potential dangerous farm areas / equipment	All
Access to the site by unauthorized persons to the farming site	Any person entering the agricultural / cultivation and other operation areas (fields and packaging) will only be allowed after formal approval.	All
Emergency	Develop and implement an emergency response plan for third parties falling into or off hazardous excavations and causing injury.	Operational
Responsibility	TradePort Namibia's	

4.4 Biodiversity Management and Mitigation

4.4.1 Issue: General physical disturbance of biodiversity

The section is a high level assessment of biodiversity impacts in line with the content of the baseline description (Section 4), and the content of the EMP (Appendix E). The assessment covers the following broad topics: physical destruction of biodiversity and related functions, impacts on surface water resources as an ecological driver, and general disturbances to biodiversity.

Table 4: Physical disturbance of biodiversity - link to phase and activities

Issue	Management commitment	Phase
Physical disruption to biodiversity by Staff	The Principle of zero tolerance to killing and collecting of biodiversity i.e. no poaching (including collection firewood) will be allowed and poaching offenders will be prosecuted.	All
	All species with a conservation and or protection status should be identified, clearly marked and preserved (by at least 50%)	Construction
Physical disruption to biodiversity by infrastructures	Erect a game-proof fence around the pit and extraction / removal operations to ensure that animals have no access to operation areas, which may be contaminated by agricultural chemicals.	All
	Upon completing construction, initiate restoration of all infrastructure including roads areas that were only impacted during construction and will not be required for farming operation	Operation, decommissioning and closure
Emergency	Certain instances of injury to animals may be considered emergency situations. These will be managed in accordance with the TradePort's Investment emergency response procedure.	All
Responsibility	TradePort Namibia's	

4.5 Air and Noise Management and Mitigation

4.5.1 Issue: Air and noise pollution

Clearing work, cultivation (soil tillage) and herbicides / parasites spraying on site is likely to create very little dust and other possible pollutants that may contribute although little to air pollution. This may be an unwanted change to the community of the area.

Table 5: Air pollution – link to phase and activities

Issue	Management commitment	Phase
Air pollution impact to Biodiversity and nearby Human community	All design mitigation measures to be implemented (including water sprays on all roads and temporary unpaved farm roads, waters sprays at highly polluting areas (activity sites)	All
	All diesel powered equipment and plant vehicles should be kept at a high level of maintenance. Any change in the noise emission characteristics of equipment should serve as trigger for withdrawing it for maintenance.	All
Impact of noise on the environment/ sensitive receptors	Document and investigate all registered complaints and make efforts to address the area of concern where possible. A mechanism to monitor noise levels, record and respond complaints and mitigate impacts should be developed.	All
Responsibility	TradePort Namibia's	

4.7 Socio-Economic Management and Mitigation

4.7.1 Issue: Economic impacts on local livelihoods

The activities associated with the TradePort's sand extraction / removal have socio-economic impacts in all phases – some positive and some negative. These impacts related to amongst others employment/job creation, local and regional economies, land use and surrounding landowners and community safety and security. During the construction phase TradePort's may at a minimal provide job opportunities to the local community. This EMP aims to provide measures to enhance the positive impacts and limit the negatives impacts.

Table 6: Health and safety – link to phase and activities/infrastructure

Issue	Management commitment	Phase
Impacts on livelihood resettlement	Engage with the affected communities through a process of informed consultation and participation to reach consensus on any activities that affect them.	All
	Provide affected people with necessary transitional support (such as short-term employment, subsistence support, or salary maintenance).	Construction
Impacts on HIV / AIDS	Preparation of a health and safety plan for workers and impacted communities addressing issues including education on measures to prevent the spread of HIV/AIDS through awareness campaigns, provision of safety equipment for workers, child labour prohibited	All
Responsibility	TradePort Namibia's	

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ANNEXURE 1A: PROOF OF SCREENING

REPUBLIC OF NAMIBIA
Ministry of Environment, Forestry & Tourism

2026-02-11

Dear EnviroLeap,

This email serves to inform you that your application **APP-006564** has been verified

Taking the following into considerations:

- Location of the project
- Scale of operation of the project

Please upload the following documments:

- Scoping Report
- EMP
- Confirmation of screening notice received (through email) in terms of assessment procedures (Section 35 (1)(a)(b) of the Environmental Management Act, No 7 of 2007)
- Preliminary Site Map (Project boundaries) with coordinates (decimal degrees) and a Legend
- CV of Environmental Assessment Practitioner (EAP)
- Declaration for the Submission of Assessment Reports and other Support Documents (upload Declaration Form from www.eia.meft.gov.na (downloads)
- List of all persons, organisations and organs of state that were registered in terms of regulation 22 as interested and affected parties in relation to the application
- Proof of Newspaper advertisement, once a week for two consecutive weeks in at least two newspapers circulated widely in Namibia
- Proof of written notice to the local authority council, regional council and traditional authority, in which the site or alternative site is situated; and consent obtained
- Proof of written notice to any other organ of state having jurisdiction in respect of any aspect of the activity;

Please login onto our portal to upload required documents, if any https://eia.met.gov.na

NB- for the purpose of Section 38 of the Environmental Management Act, 2007 read with Regulation 4(d), kindly forward copies of all relevent documents i.e (application forms, EIA, Scoping reports, EMP etc) to the office of the Environmental Commissioner

ANNEXURE 1B: EAP RESUME

...a leap towards better environmental compliance

PROFESSIONAL PROFILE

Mr. LAWRENCE TJATINDI
Project Manager and Environmental Practitioner

ID Number :	82110710012	EMAIL:	eap.trigen@gmail.com
Country of Résidence :	Namibia	Cell:	+264-81-486-9948
Nationality:	Namibian		

PROFESSIONAL OVERVIEW

Experience Internationally:

Countries worked:	Namibia
Languages:	English (*fluently written, spoken and read*); Otjiherero (fluently spoken, written and read) Afrikaans (*well spoken, fairly written and read*)
Languages:	Project Management Tailings Risk and water balance Waste water treatment technologies Feasibility studies – Mining Projects Water Supply and reticulation design

ACADEMIC QUALIFICATIONS:

2009	University of Stellenbosch	*Senior Management Development Program (Business School)*
2007	University of Cape Town	*Bachelor of Science in Chemical Engineering*

EMPLOYMENT RECORD:

May 2022 - Current: Enviro-Leap Consulting Cc
Position: Project Management and Environmental Practitioner

- Update stakeholder register and manage engagement plan
- Conduct environmental compliance inspections and audits
- Represent Enviro-Leap at stakeholder engagement meetings
- Coordinate closure and rehabilitation of mining development projects
- Attend site visits for new projects
- Meet with clients to align requirements with Enviro-Leap' s output.Compile and review environmental policies and audits

January 2018 – April 2022 (fixed- term 4 plus years)
Position: Senior Engineer – Water and Tailings Risk Management: Dundee Precious Metal Tsumeb Smelter
Responsibilities:

- Waste water treatment and effluent quality compliance monitoring
- Ensure compliance with water abstraction permit
- Internal auditing of Tailings compliance with corporate standards and international good practice
- Operationalization of recommendations from Expert reviews and mandatory audits.
- Ensure tailings operation is in line with design specifications
- Provide specifications that feeds into the tailings design tables

P. O. Box 25874, Windhoek +264-81-486-9948 eap.trigen@gmail.com

April 2015 – December 2017
Position: Senior Metallurgist – Product Recovery Section: Langer Heinrich Uranium Mine
Responsibilities:

- Technical advisor to the recovery section – Setting metallurgical Operating parameters
- Test work lead for Membrane technology – Nano Filtration, Ultra Filtration, Reverse Osmosis
- Test work lead for Ion exchange separation efficiency – NIMCIX and Fixed Bed ion exchange

August 2010 to July 2014
Position: Technical Metallurgist – Water Management and Tailings Planning: Rössing Uranium Mine
Responsibilities:

- Technical advisor to the tailings management team
- Recommend improvement initiatives for return dam solution
- Formulation of 5 year deposition planning

Position: Process Control Metallurgist
Responsibilities:

- Technical advisor for the recovery section of the refinery

Position: Test work Lead – Pre-feasibility study for heap leaching of low grade Uranium ore
Responsibilities:

- Lead the test work team for the feasibility study for Heap Leaching
- Write up of study findings
- Design test work program for the study

February 2007 – July 2010
Position: Graduate Metallurgist – Sulphuric acid and water treatment plant: Skorpion Zinc mine

- Completed graduate development program
- Junior area metallurgist for the acid and water section of the plant
- Custodian of water balance of the plant
- Metal accountant for the refinery section

CERTIFICATION

I, the undersigned, Shadrack Tjiramba, hereby certify to the best of my knowledge that the information provided herein correctly describe me, my qualifications and experience.

Date: 20 January 2024

Signature: 

P. O. Box 25874, Windhoek +264 81 622 9933 Email eap.trigen@gmail.com