ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED ESTABLISHMENT OF A DIMENSION STONE AND COPPER CONCENTRATE STOCKHOLDING FACILITY ON FARM 38, LEASE 18, WALVIS BAY, ERONGO REGION

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DOCUMENT DATA SHEET

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EXECUTIVE SUMMARY

Introduction

Farpoint Investments (Pty) Ltd (The proponent) has been allocated a 2 Ha / 20,000 m^2 portion of farm 38 by the Walvisbay Municipality on a 5years lease agreement to develop a storage facility for dimension stone (marble and granite) and copper concentrate. The proposed site (lease 18) is located on a portion of Farm 38, registration Division F between the Rooikop and plum area, south of the C14/M36 Main Road. The industrial erven is found approximately 14 km south-east of Walvis Bay town, wedged between Farms 19, 29,33 and 37, Farm 19.

The project entails construction of the storage facility as well construction or appropriate upgrading of existing infrastructure such as electricity, water and sewerage. Walvis Bay, Farm 38 conform with the proponent's location strategy as it is in close proximity to the Walvis Bay Port. The port is important for the support of economic activities in the inland since it acts as a crucial connection between sea and land transport. The stock-holding site will be used for: Receipt of granite and marble stones, storage facilities, packaging of stock (granite and marble), cleaning of stones with brasses (without noise generating machinery and hazardous liquid) and transportation of granite and marble stones. The mining industry requires a safe, feasible and affordable means of exporting finished goods and importing raw materials. As such Farpoint Investments (Pty) Ltd has identified a need to develop an industrial storage facility for dimension stone and copper concentrate.

The proposed land use and transformation activities of storage facility development falls under the activities that are listed in the Environmental Management Act, 2007 (Act No. 7 of 2007) and EIA Regulations (2012). These activities cannot be undertaken without an Environmental Clearance Certificate (ECC). In order to obtain an Environmental Clearance Certificate for the proposed activities, the proponent is required to have undertaken an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) reports. These reports are a tool to identify, predict and evaluate the economic, environmental and social impact of proposed activities.

Potential impacts of the proposed land use and transformation activities of storage facility development, associated infrastructures were cumulatively assessed, where relevant, taking the existing environment and all other activities and facilities associated with the proposed project into consideration. This Scoping Report together with the EMP, will provide sufficient information for the Municipality of Walvis Bay as the Competent Authority and the MET to make an informed decision regarding the proposed project, and whether an environmental clearance certificate can be issued or not. It is hereby recommended that proposed dimension stone and copper concentrate stock-holding on lease 18, farm 38 be granted an Environmental Clearance Certificate, provided that: All mitigations provided in this report are implemented as stipulated and where required and emphasized, improvement should be effectively put in place.

ACRONYMS AND ABBREVIATIONS

Below a list of acronyms and abbreviations used in this report.

Acronyms / Abbreviations	**Definition**
BID	Background Information Document
CBD	Central Business District
EIA	Environmental Impact Assessment
DEA	Department of Environmental Affairs
EAP	Environmental Assessment Practitioner
EMP	Environmental Management Plan
DRT	Department of Roads and Transport: Walvis Bay constituency
I&APs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
MEFT: DEA	Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs
PPP	Public Participation Process
Project area	The 2 ha area intended for storage facility and associated infrastructure development

7. Environmental Management Plan (EMP)

7.1 Overview

Environmental management plan (EMP) serves as a risk strategy that contains logical framework, monitoring programs, mitigation measures and management control. The aim of an Environmental Management plan (EMP) is to develop procedures to implement project's mitigation measures and monitoring requirements. An EMP ensures the community that the environmental management of the project is acceptable. As well as stipulating the roles and responsibilities of persons involved in the project. It further ensures that legal and policy requirements are well known and understood by the proponent, its employees and contractors and will be strictly enforced by its management team. Issues and concerns identified in the EIA will form a set of environmental specifications that will be implemented on site.

The control measures described in this EMP have been developed following consideration of the findings of the Environmental Impact Study (EIS), which concluded that a number of environmental values would be impacted by the proposed activities. The intent of the proposed control measures is to ensure that project related activities will not negatively affect the environment or the health, welfare and amenity of people and land uses by meeting or exceeding statutory requirements.

This EMP is a live document and shall be reviewed at predetermined intervals, and/or updated during the ESIA process when / if the scope of work alters, or when further data/information is added. All personnel working on the project will be legally required to comply with the requirements set out in the Final Draft EMP that is approved by MEFT

Furthermore, overall objectives of this EMP are:

- To develop measures that will mitigate the adverse impacts of the proposed project
- Ensuring compliance with regulatory authority stipulations and guidelines

- To formulate measures to enhance the value of environmental components where possible.
- To formulate measures to protect environmental resources as well enhance the value of environmental components where possible.
- Responding to unforeseen events and providing feedback for continual improvement in environmental performance.

7.2 Summary of the proposed activities

The proponent has been allocated a 2 Ha/ 20,000 m^2industrial erven portion of farm 38, lease 18 by the Walvisbay Municipality on a 5 years lease agreement to establish a storage facility for dimension stone (marble and granite) and copper concentrate. The primary purpose of proposed stockholding site is planned for the receipt, sorting, packaging, storage and dispatching of all granite and marble stones and copper concentrate in tonnage of bags and transport trucks. This process forms part of a chain of activities that eventually leads to the final incorporation of the stock within a building or lockable containers. The proposed project have potential impacts on the following:

- Potential land or soil disturbances,
- Soil and water resources contamination,
- Biodiversity (fauna and flora),
- Air quality,
- Noise,
- Health and safety,
- Vehicular traffic impact,
- Archaeological impact.

7.3 Legal implications and obligations under the EMP

The EMP will be sent to the Directorate of Environmental Affairs (DEA) of the Ministry of Environment, Forestry and Tourism (MEFT) for approval. Once the DEA is satisfied with the contents of the EMP, they will issue an Environmental Clearance Certificate (ECC) to the Proponent to commence with the establishment of a lithium mine in the proposed area. The ECC is linked with the recommendations of the Environmental Management Plan. Once the ECC is issued, the EMP becomes a legally binding document and each role-player including contractors and sub-contractors are made responsible to implement the relevant sections of the EMP and is required to abide by the conditions stipulated in this document. This document is a live document, which will be review and updated as needed.

7.4 Environmental Management Principles

The proponent will ensure that all parties involved in the project uphold the following broad aims:

1. All persons will be required to conduct all their activities in a manner that is environmentally and socially responsible. This includes all consultants, contractors, and sub-contractors, transport drivers, all staff workers, guests and anyone entering the stock holding premises.

2. Health, Safety and Social Well Being

- Safeguard the health and safety of project personnel and the public against potential impacts of the project. This includes issues of road safety, precautions against natural dangers on site, and occupation health hazards; and,
- Promote good relationships with the local authorities and their staff.

3. Biophysical Environment

- Wise use and conservation of environmental resources, giving due consideration to the use of resources by present and future generations;

- Prevent or minimize environmental impacts;
- Prevent air, water, and soil pollution, biodiversity conservation and due respect for the purpose and sanctity of the area.

To achieve these aims, the following principles need to be upheld.

Commitment and Accountability:

The proponent's senior executives and line managers will be held responsible and accountable for: Health and safety of site personnel while on duty, including traveling to and from site in company vehicles and environmental impacts caused by mining or by personnel engaged in the mining activities, including any recreational activities carried out by personnel in the area

Competence

The proponent will ensure a competent work force through appropriate selection, training, and awareness in all safety, health and environmental matters.

Risk Assessment, Prevention and Control

This is to identify, assess and prioritize potential environmental risks associated with proposed project activities. The main objective of is to prevent or minimize priority risks through careful planning and design, allocation of financial resources, management and workplace procedures. In cases where the event of adverse impacts arises, a prompt intervention by the proponent will be done and a through procedure of how this will be done will be outlined in the safety and management policies of the proponent's profile.

Performance and Evaluation

Set appropriate objectives and performance indicators. Comply with all laws, regulations, policies and the environmental specifications. Implement regular monitoring and reporting of compliance with these requirements.

Stakeholder Consultation

Create and maintain opportunities for constructive consultations with employees, authorities, other interested or affected parties. Seek to achieve open exchange of information and mutual understanding in matters of common concern.

Continual Improvement

This will be done through continual evaluation, feedbacks from the stakeholders, and innovation by the proponent, to seek to improve performance regarding social health and well-being and environmental management throughout the lifespan of the mining project

7.5. Identified impacts, monitoring and proposed mitigation measures

7.5.1. Bio-physical environmental impacts

7.5.1.1 Impacts on surface and ground water

Waste water from day to day operation of the construction site or stock holding site, if not properly handled may result in the pollution of surface and groundwater sources. Construction activities may lead to runoff of construction contaminants, sediment being deposited into drainage lines, pollution from litter and general construction wastes due to improper site management. Pollution may occur from poor vehicle maintenance, improper storage of hazardous materials, waste water and used oil. There is also possibility that the development will create pollution during the operation phase from the above mentioned activities as well as poor handling of copper concentrate. Copper concentrate is insoluble in water and its metals content has low direct bioavailability. However, extended exposure in the aquatic and terrestrial environment can lead to the release of contained metals in bioavailableforms.This impact is considered to be short term and can be minimized by various mitigation measures as included below. If mitigation is enforced the impact could be reduced to a low significance.

Mitigation Measures to be enforced:

Construction Phase

- No dumping of waste products of any kind in or in close proximity to surface water bodies and possible recharge areas for groundwater.
- Waste water / contaminated water from the construction site should be contained for proper disposal.
- Appoint professional engineers to develop a detailed storm water management design as part of the infrastructure service provision of the development.
- The service infrastructure should be designed and constructed by suitably qualified engineering professionals
- Ensure that oil/ fuel spillages from vehicles and machinery are minimized and that where these occur, that they are appropriately dealt with.
- No rock, silt, cement, grout, asphalt, petroleum product, timber, vegetation, domestic waste or any deleterious substance should be placed or allowed to disperse into any drainage line

Impact	**Effect**			**Likelihood**	**Significance**
	Temporal scale	**Spatial scale**	**Severity of impact**		
Before mitigation	Long-term	Regional	severe	Definite	High
After mitigation	Short-term	Localized	slight	May occur	Low

Operation phase

- Drip trays must be placed underneath vehicles when not in use to contain all oil that might be leaking from these vehicles.
- In all areas where there is storage of hazardous substances (i.e. hydrocarbons), there will be containment of spillages on impermeable floors and bund walls that can contain 110%ofthevolume of the hazardous substances.
- All refueling and any maintenance of vehicles will take place on impermeable surfaces.
- Pollution will be prevented through basic infrastructure design and through maintenance of equipment.

- Spill kits will be readily available on site. Employees and/or contractors will be trained to use the spill kits to enable containment and remediation of pollution incidents.
- Environmental awareness for contractor and employees to be included during inductions
- Wastewater should not be discharged directly into the environment
- No dumping of waste products of any kind in or in close proximity to water bodies
- Avail a spill response action plan in case of accident and any spills will be contained and cleaned up immediately.
- Accessibility to spill prevention and response equipment, such equipment should be visible and accessible to all employees at any given time.
- Spills will be cleaned up immediately to the satisfaction of the Environmental Manager by removing the spillage together with the polluted soil and by disposing of them at a recognized facility as stipulated in the spill response action plan.
- Designated waste collection tanks should be available on-site and away from waterways, and such isolation should be maintained at all times.
- Storage of the hazardous substances in a bounded area,

Impact	**Effect**			**Likelihood**	**Significance**
	Temporal scale	**Spatial scale**	**Severity of impact**		
Before mitigation	Long-term	Regional	severe	probable	Moderate
After mitigation	Short-term	Localized	slight	May occur	Low

7.5.1.2 Impact on air quality

In a desert environment with no natural buffer, dust particles are easily dispersed and carried away by wind be as a result the required excavation, vegetation clearing, grading and other construction activities. The main construction air contaminants that's spread around by wind is PM 10 (particulate matter with diameter less than 10 microns generating polluted dust), volatile organic compounds, gases such as carbon monoxide, carbon dioxide and nitrogen oxide. During the operation phase, if the site is not fully paved, continuous movements of people and vehicles on site can loosen and re-suspend the deposited material again into the air. It is probable that dust

will be created during the construction phase of the development, however this will be in the short term and limited to the construction phase. If the various mitigation measures below are implemented this impact could be reduced to a low negative significance.

Mitigation Measures to be enforced

- Converting high-use vehicles to cleaner fuels, where feasible
- Installing and maintaining emissions control devices, such as catalytic converters.
- Implementing a regular vehicle maintenance and repair program
- Dust suppressants such as Dustex shall be applied to all the construction clearing activities as well as all the unpaved roads to minimize wind-blown dust.
- During high wind conditions the contractor must make the decision to cease works until the wind has calmed down
- Regardless of the size or type of vehicle, fleet owners /operators should implement the manufacturer recommended engine maintenance programs.
- Cover any stockpiles with plastic to minimize windblown dust.
- During high wind conditions the proponent must make the decision to cease construction works until the wind has calmed down.
- Use of personal protective equipment for proper dust control for respiratory protection and other necessary PPE (gloves, work suits, sun hats etc.).

Monitoring

- Daily inspection on site by the ENC to ensure that all workers are wearing their protective clothes at all time during the mining process and the dry skin contact with gloves is prevented.

Impact	**Effect**			**Likelihood**	**Significance**
	Temporal scale	**Spatial scale**	**Severity of impact**		
Before mitigation	Long-term	Localized	slight	Definite	Moderate
After mitigation	Short-term	Localized	slight	Unlikely	Low

7.5.1.3 Biodiversity (fauna and flora)

Some of the activities of the proposed pose a risk to the integrity of baseline biodiversity as well as the biological productivity of the site and the immediate proximity. The project area falls under desert ecosystem, with less vegetation and less diversity of life. The following mitigations are to be undertaken to minimize further impact on the existing biodiversity:

Mitigation Measures to be enforced: **flora**

- The footprint of the area to be disturbed will be minimized as far as is practically possible.
- Remove unique fauna and sensitive fauna before commencing with the development activities and relocate to a less sensitive/disturbed site if possible.
- Recommend the planting of local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species and have important ecological functions in terms of carbon sequestration from decomposing materials at the site.
- Prevent the destruction of protected species.
- Adapt the proposed development to the local environment.

Mitigation Measures to be enforced: **fauna**

- Avoid the creation of multiples roads strips, which could result in the disturbance of breeding sites for various fauna.
- Desert Animal pathways or corridors must be made and retained where possible.
- No workers will be allowed to collect or snare, hunt or otherwise capture any wild animal.
- Birds or Nest sites will not be disturbed by any employee, visitor or contractor.
- If possible encountered bird kills and nest removal should be registered in a biodiversity data-base and information should be made available to the general public.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	slight	Definite	Low
After mitigation	Short-term	Localized	slight	Unlikely	N/A

7.5.1.3.1 Impacts of Alien invasive Plants

Alien invasive plants are prevalent in areas affected by land transformation and anthropogenic disturbance. It is a well-known fact that disturbance to the natural environment often encourages the establishment of alien invasive weed species. Infrastructure development are a major disturbance, and thus may promote the establishment and expansion of invasive plant communities. Seed or plant material may be imported to site from building materials if the source is contaminated. It is also possible that, plant or seed material may adhere to car tyres or animals, in some cases seeds of alien invasive plants may blow from debris removed at sites.

Mitigation Measures to be enforced:

- The site manager will ensure that debris is properly disposed.
- Vehicle tyres inspections can be carried out although this may not be a practical mitigation measure.
- The proponent should implement an alien plants awareness campaign to educate and sensitize the employees and the local community on the menace of planting alien vegetation in the area.
- Eradicating alien plants by using an Area Management Plan.
- Prevent the introduction of potentially invasive alien ornamental plant species such as; *Lantana, Opuntia, Prosopis, Tecoma*, etc.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	moderate	Definite	Moderate

After mitigation	Short-term	Localized	slight	Unlikely	Low

Methods for monitoring:

- Regular monitoring of any unusual signs of alien species.
- The proponent and local community should establish an alien plant task force to ensure that there is no planting of alien plants species in the area.
- The proponent should adopt and support the implementation of an annual alien plants clearing campaign.

7.5.1.4 Noise Impacts

During the construction phase noise emissions on site will be associated with the operation of construction vehicles and equipment. Meanwhile, during operation phase the main noise sources are associated with loading and transport of equipment or materials to or from stock holding. Exposure to loud noises at work can cause irreversible hearing damage, workplace accidents and be a contributing factor to other health problems.

Mitigation Measures to be enforced

Continuous monitoring of noise levels should be conducted to make sure the noise levels at the site does not exceed acceptable limits.

- Installation of proper sound barriers and (or) noise containments, with enclosures and curtains at or near the source equipment.
- Use of rubber-lined or soundproof surfaces on processing equipment.
- Use of rubber-belt transport and conveyors;
- Installation of natural barriers at facility boundaries (e.g. Vegetation curtains or soil berms).
- All activities with high noise levels should be restricted to daylight hours. Heavy equipment must only be used during weekdays and between the hours of 7 am and 6 pm.
- No noise generating activities should be undertaken over weekends and public

holidays.

- In the event that activities continue outside the stipulated hours the contractor will communicate such occurrences to potentially affected communities prior to commencing such activities.
- Do not allow the use of horns/hooters as a general communication tool, but use it only where necessary as a safety measure.
- Workers working near high noise mining machinery will be provided with wear protective equipment such as ear muffs and earplugs.
- Equipment and construction vehicles must be kept in sound working order at all times, and comply with the stipulated maximum sound level of 8 decibels.
- All areas where noise levels are above 85 dB should be managed and controlled in accordance with the relevant guidelines.
- Safe minimum distance from noise generating activities should be introduced.
- Taking advantage of the natural topography as a noise buffer during facility design.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Short-term	Localized	slight	Probable	Moderate
After mitigation	Short-term	Localized	slight	May occur	Low

Monitoring

Noise monitoring may be carried out for the purposes of establishing the existing ambient noise levels in the area of the proposed or existing facility, or for verifying operational phase noise levels. Noise monitoring programs should be designed and conducted by trained specialists. The type of acoustic indices recorded depends on the type of noise being monitored, as established by a noise expert.

7.5.1.5 Land and soil disturbance

Before construction of the stock holding excavation is required to lay the foundation, however due to the small scale of the proposed project, excavation and topographic manipulation will not be required over the entire property but only within the area planned for construction. Prior to construction the site shall be cleared of vegetation, brushwood, stumps etc. This process brings major disturbance on the top soil biota. Topsoil refers to that layer of soil covering the earth and which provides a suitable environment for the germination of seeds, allows the penetration of water, and is a source of micro-organisms, plant nutrients and in some cases seed. Sediments generated from erosion on construction site can be a major source of pollution to local waterways

Mitigation Measures to be enforced

Construction phase

- Minimize disturbance to topsoil
- The contractor should choose building and construction methods that minimize the need for excavation and suns oil exposure.
- Restrict off road vehicles and equipment to designated areas.
- Topsoil shall be stockpiled only in the areas dedicated for only that purpose, even if the topsoil is only partially cleared.
- Maintain the small shrubs found on the site and only remove vegetation that has an impact on the development.
- Erosion control mechanism to curtail storm water controls and by minimizing the amount of soil exposed during construction activity.
- The design, construction, and location of access to main roads will be in accordance with the requirements laid down by the controlling authority.
- Land markings, vehicle tracks, and excavations shall be restored to the original landform and, visual state as much as possible.

Operation phase

- No chemical pollution shall be allowed to contaminate the soils; any vehicle or equipment found to be attributing to this shall be removed from the site and repaired.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	moderate	Unlikely	Low
After mitigation	N/A	N/A	N/A	N/A	N/A

7.5.1.6 Impacts on Archaeological Sites

Potential damage to archaeological sites may be impacted through unintentional destruction or damages are a result of vehicle tracks, footprints and actions of contractors, employees. Currently, there is no information provided about known archaeological heritage remains and sites within the project site. Therefore, this impact can be rated medium to low, if there are no mitigation measures in place. Any new discoveries archaeological significant objects on the site should not be disturbed, but are to be reported to the project Environmental officer or National Heritage Council offices.

Mitigation Measures to be enforced

- Adhere to practical guidelines provided by an archeologist on site to reduce archaeological impacts.
- All archeological sites to be identified and protected before construction commences.
- Notices/ information boards information will be placed on site.
- Training employees regarding the protection of these sites.
- Obtain appropriate clearance or approval from the competent authority.
- In the event of such finds, all activities must stop and the project management or contractors should notify the National Heritage Council of Namibia immediately.

Monitoring

- An archaeologist will inspect any identified archaeological sites before project commencement.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Permanent	Study area	slight	Unlikely	Low
After mitigation	Permanent	Study area	slight	Unlikely	Low

7.5.1.7 Impacts on traffic

During the construction phase, large construction vehicles will be utilizing the existing road network. This may result in the impeding of traffic flow, especially during peak hours and damaging of the existing gravel road. This will only happen for the duration of the construction period and therefore the impact is considered to be of moderate significance before mitigation.
During the operation phase, granite, marble, copper concentrate will be transported by trucks to the storage facility via D 1983 and C14/M0036 roads.

Mitigation Measures to be enforced

Construction phase

- Construction vehicle should not utilize any existing road infrastructure during peak traffic periods.
- The contractor must make adequate provision for safety signage, red flags and other appropriate measures to increase the safety of other road users.
- Construction vehicles' need to be in a road worthy condition and maintained throughout the construction phase.

Operation phase

- Limit and control the number of access points to the site.
- Ensure that road junctions have good sightlines.

- Transport the materials in the least amount of trips as possible.
- Adhere to the speed limit.
- Implement traffic control measures where necessary.
- Minimize the movement of heavy vehicles during peak time.
- Minimize the movement of vehicles on or close to the C14/M0036 Main Road as well as to the D1983.

7.5.1.8 Fire and Explosion Hazard

In cases where a fire or an explosion takes place on site, the following mitigation measures should be taken to ensure safety of the people and reduce damage to properties.

Mitigation Measures to be enforced

- A designated area needs to be identified as an assembly area where personnel meet in case of such incident. All employees, contractors and visitors should be made aware of this area through inductions conducted before entering the site.
- All personnel on duty should be accounted for to make sure that there is no one in direct danger of the incident.
- A fire and explosive management policy and procedures document for the site should be drafted and review on a regular basis and every employee should know the content of this document so that they can act accordingly when a fire or an explosion breaks out.
- Refresher courses on the content of the fire and management policy and procedure document should be given on a regular basis to ensure that the employees aware and are competent in reacting to such incidents.
- Sufficient fire extinguishers with sufficient length of hosepipes will be made available on the surface for fire protection.

7.5.1.9 Hazardous Materials Management

Occupational Health and Safety Management Plan should address applicable, essential elements of occupational health and safety managements applicable in the work place:

- All chemicals and other hazardous substances must be stored and maintained in accordance with the Hazardous Substances Ordinance (No. 14 of 1974), with all relevant licences and permits to be obtained where applicable.
- Given the potential harm to human health during handling and use of any of hazardous substances it is essential that all staff be trained with regards to the proper handling of these substances as well as First Aid in the case of spillage or intoxication.
- Storage areas for all substances should be bunded and capable to hold 120% of the total volume of a given substance stored on site.
- Job safety analysis to identify specific potential occupational hazards and industrial hygiene surveys, as appropriate, to monitor and verify chemical exposure levels, and compare with applicable occupational exposure standards.
- Hazard communication and training programs to prepare workers to recognize and respond to workplace chemical hazards. Programs should include aspects of hazard identification, safe operating and materials handling procedures, safe work practices, basic emergency procedures, and special hazards unique to their jobs Training should incorporate information from Material Safety Data Sheets for hazardous materials being handled. MSDSs should be readily accessible to employees in their local language.
- Provision of suitable personal protection equipment (PPE) (footwear, masks, protective clothing and goggles in appropriate areas), emergency eyewash and shower stations, ventilation systems, and sanitary facilities.
- Monitoring and record-keeping activities, including audit procedures designed to verify and record the effectiveness of prevention and control of exposure to occupational hazards, and maintaining accident and incident investigation reports on file for a period of at least five years.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	slight	Probable	Moderate
After mitigation	Short-term	N/A	slight	May occur	Low

7.5.1.10 Storm water management

The proposed development will result in an increase impermeable surface (paved open area, roof of the stock holding) which in turn will result in an increase in run-off. However due to the arid climate of the proposed site, little or no rainfall (33mm/year) is expected in the area. Therefore storm water within the project site is not considered as a major concern.

Mitigation Measures to be enforced:

- It is recommended that paving is used for covering the yard and the parking area to allow for some seepage of storm water.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	slight	Probable	Moderate
After mitigation	Long-term	Localized	slight	Probable	Low

7.5.1.11 Visual impacts

The development will consist of a storage facility situated on remote, barren land of the Namib Desert. Due to the aridity of the study area, vegetation buffer is not present, therefore Within the Zone of Visual Influence view viewpoints and receptors will experience visual exposure to the site and proposed development. Based on distance from the project to selected view viewpoints or receptors, the 'visual exposure' or visual impact tends to diminish exponentially with distance.

Mitigation Measures to be enforced:

- It is however recommended that the storage facility conforms to the original style of the industrial buildings as per the Walvis Bay Town Planning Scheme. No further mitigation measures are included.

Impact	Effect			Likelihood	Significance
	Temporal scale	Spatial scale	Severity of impact		
Before mitigation	Long-term	Localized	slight	Probable	Moderate
After mitigation	Long-term	Localized	slight	Probable	Low -

7.5.1.12 Waste management

Proper solid waste management will involve full commitment by all the employees and contractors on site. Solid waste which will be generated from this project if not managed properly will have effects and will alter the natural environment.

Mitigation Measures to be enforced:

- A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site.
- Solid waste will be collected and disposed off at an appropriate local land fill.
- Place priority on waste reduction, waste reuse and waste recycling, in that order.
- Sufficient waste storage bins on site and regular emptying of the waste storage bins
- The collected solid waste should be disposed at registered and approved disposal site agreed upon by both Walvis Bay Municipality and the proponent.
- Mandatory waste segregated right at the source of waste generation. The collection of segregated waste would be made from the site and amenity areas.

- Reusable and recyclable waste will be disposed of by selling to scrap dealers and private contractors for resale.
- Non-degradable waste will be transferred to the municipal solid waste management system.
- Waste generated will be handled in accordance with the contract signed with the landowner. This shall include: waste should be separated and recycled / re-used where possible.
- Employees and contractors will be shown the importance of correct waste disposal as well as waste minimization and recycling.

7.5.2. Social-economic impacts

7.5.2.1. Positive Impacts

Job Creation

Local recruitment will be encouraged by the proponent with a target of at least 65% locals. This operation thus contributes to the alleviation of unemployment which is severe due to recent retrenchments caused by Covid-19 economic recession. Employment on the new project will contribute to the local economy growth of the Walvis Bay town.

Enhancement measures

- The proponent will introduce training programs (bursary schemes, on the job training etc) in order to boost the supply of local skills
- It is proposed that local people community members from Walvis Bay and surrounding areas should be considered first for employed. Especially where no specific skills are required.
- Gender equality considerations during recruitment process.
- Employment preference will be afforded to previously disadvantaged Namibians.

7.5.2.2 Negative Impacts

Impact on health, safety and security

Impacts to human health may occur at all stages of the proposed project. Due to the nature of the job and the work environment, construction sites have many safety hazards. Construction workers are at high risk when operating or working around heavy equipment. Heavy equipment hazards include being struck or crushed by equipment and loads that aren't properly secured. During the operation phase, occupational exposures to hazardous substances are common in the working environment during the handling, storage and transportation of the dimension stone and copper concentrate. Prolonged inhalation of dust may result in respiratory irritation. Inhalation of high concentrations of copper oxide fume may cause irritation of the upper respiratory tract and may result in a form of metal fume fever, characterized by flu-like symptoms such as chills, fever, nausea, and vomiting. Ingestion of copper may cause nausea, vomiting, headaches and dizziness.

Mitigation Measures to be enforced:
Safety on site

- The workforce should be provided with all necessary Personal Protective Equipment where appropriate.
- All vehicular equipment operators must have valid licence for that particular vehicle class. Moreover, all vehicular equipment, heavy equipment and vehicles should be properly maintained to avoid accidents due to malfunctioning.
- Train workers on using proper body mechanics and lifting methods.
- The proponent should also test the competence of the individual drivers before they start operating.
- The proponent should ensure that all employees are given safety training as well as regular refresher trainings.
- Clearly demarcate dangerous areas and no go areas on site.
- Staff and visitors must be fully aware of all health and safety measures and emergency procedures.

- The contractor must comply with all applicable occupational health and safety requirements.
- Emergency medical treatment should be available on site. Provide for a first aid kit and a properly trained person to apply first aid when necessary.
- Separate entry and exit points should be established for heavy machinery, vehicle access to strengthen pedestrian safety.
- A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted diseases, Covid 19, hepatitis etc. Encourage HIV counseling and testing and facilitate access to Antiretroviral (ARV) medication.
- Prevent diseases spread by biological agents by providing proper toilets and cleaning up facilities, proper waste removal, running water and detergent on site.

Impact	**Effect**			**Likelihood**	**Significance**
	Temporal scale	**Spatial scale**	**Severity of impact**		
Before mitigation	Long-term	Localized	Beneficial	Probable	Moderate +
After mitigation	Long-term	Localized	Beneficial	Probable	High +
No Go					
Before mitigation	Long-term	Localized	Slight	Probable	Low +

Methods for monitoring:

- Public meetings will be held by the proponent whenever necessary.
- Regular meeting with the Interested and affected parties, where they can air their concerns should be done four times in a year.
- The outcome of these meeting should be recorded in a form of a report and the proponent needs to address the issues raised in this meeting.

7.6 Environmental Management Plan, Organization and Implementation

The environmental aspects which may be affected by the proposed project have been categorized into negative and positive impacts as an extension of the preceding sections. This section summarizes the objectives, indicators to be observed, schedules be adhered to and roles and responsibilities of various stakeholders to the EMP.

Table 4: Roles and responsibilities of various stakeholders to the EMP

Role	Responsibilities and duties
Proponent	– Responsible for the management and implementation of the EMP – Ensure environmental policies are communicated to all personnel throughout the proposed project and that employees understand the guidelines of the EMP – Responsible for providing the resources required to complete the project tasks – Appoint a safety health and environment manager and supporting officers, and – Ensure all workers are inducted on safety measures.
Safety Health and Environment management	– Oversee safety health and environment related activities – Monitor daily operations and ensure adherence by personnel to the EMP – Maintain the community issues and concerns register and keep records of complaints, and – Maintain an up-to-date register of employees who have completed site induction. – Receive, recording and responding to complaints – Ensure adequate resources are available for the implementation of the EMP – Ensure safe and environmentally sound operations, and – Responsible for the management, maintenance, and revisions of this EMP
Foreman on duty	– Ensure that all contract workers, sub-contractors and visitors to the site are aware of the requirements of this EMP, relevant to their roles and always adhere to this EMP – Report any non-compliance or accidents to the Safety Health and Environment Manager.
Employees	– Adhere to measures set out in the EMP – Ensure they have undertaken a site induction, and – Report any operations or conditions which deviate from the EMP as well as any non-compliant issues or accidents to the environmental manager

The table above is summarized below, with the following parties to aid in overseeing that the overall objective of this document is met;

- Management Committee
- Safety Health and Environment Manager
- Safety and Health Officer
- Environmental Officer
- Foreman on duty
- Personnel on duty/ employees

The following table emphasizes the role of each officer in the different management plans discussed in the previous section.

Table 5: Implementation of the objectives should be adhered to as indicated in the table.

Objectives	**Indicators**	**Responsibility**
To avoid any form of hydrocarbon spills on and around the mining site	No hydrocarbon spillage or/and remnants of hydrocarbon spillage shall be visible around the project site	Personnel on duty, Foreman on duty
To avoid any form of waste , be it waste rocks, discarded copper concentrate powder, paper, metal, plastic on or around the storage facility	No litter or/and remnants of liter shall be visible around the project site	All employees, Environmental Officer, safety, Health and Environment Manager.
To minimize land and soil disturbance	Driving tracks and excavation shall be restricted and only be visible within the project site.	Personnel on duty, Foreman on duty and Environmental Officer.
To protect and conserve fauna and flora within the project area	Minimum levels of habitat disturbance	Safety, Health and Environment Manager, Environmental Officer and personnel on duty
To minimize dust generation on site and atmospheric pollution	Emissions/generation particulate content of the dust around the site and gravel roads shall not exceed maximum allowable concentration that may affect human being and animals	Foreman on duty, Environmental Officer and Safety Health and Environment Manager.
To ensure compliance with statutory requirements	Assurance measures shall be put in place and Periodic inspections aimed at corrective action undertaken,	Environmental Manager, Safety Health and

	recorded and documented	Environment Manager.

The following tables gives the mitigation measures to be undertaken during construction, operation, closure and decommissioning phases with the proponent responsible for implementation.

Table 6: Summary of Environmental Management Plan during construction, operation and decommissioning phases

Construction phase			
Environmental impacts	**Proposed mitigation measures**	**Responsibility**	**Monitoring plan**
Air pollution	• Regular maintenance of vehicles and equipments. • Brief workers and contractors. • Control speed and operation of construction vehicles. • Regular maintenance of vehicles, construction equipments and heavy machineries. • Provide workers with dust masks.	Personnel on duty, Foreman on duty and Environmental Officer	• Amount of dust produced. • Level of landscaping executed.
Noise pollution	• All noise should be kept within reasonable levels. • Employees and neighbors should be notified of any scheduled unusual noise. • Regular maintenance of vehicles, equipments and heavy machinery. • Workers should be provided with personal hearing protection if working in a noisy environment.	Foreman on duty, Environmental Officer, Safety Health and Environment Manager.	• Amount of noise produced
Solid waste	• Littering should be discouraged by having strategically placed bins and refuse skips on site. • Recycling plastic, paper and cans should be encouraged on site • The bins should be emptied on a regular basis by the	Personnel on duty, Environmental Officer and Safety Health and Environment	• Presence of dust bins/waste collection points.

	proponent or an independent contractor. • The site should have containers with bulk storage facilities at convenient points to prevent littering.	Manager	
Oil leaks and spills	• Contactor should have a sealed designated area where maintenance is carried out to prevent percolation of contaminants. • Oil products should be handled carefully on bounded surfaces; in case it leaks. • Vehicles and equipment should be well maintained to prevent oil leaks.	Personnel on duty, Foreman on duty Environmental Officer and Safety Health and Environment Manager	• Absence of oil spills and leaks on site.
First aid	• A well-stocked first aid kit shall be maintained by a qualified personnel.	Safety Health and Environment Manager, Safety and Health Officer.	• Contents of the first aid kits.
Visual	• Environmental considerations will always be adhered to before clearing roads, trenching and excavation.	Safety Health and Environment Manager, Environmental Officer	• Employees to be trained on how to minimize impacts that can easily be identified with the eye.
Archaeological sites	• Adhere to practical guidelines provided by the responsible archaeologist to reduce archaeological impacts. • All archaeological sites to be identified and protected before development commences.	All personnel on duty, Environmental officer, Safety Health and Environment Manager	• Register of all archaeological sites identified.
Occupational health and safety	• Provide personal protective equipments, train workers on personal safety, and how to handle equipments and machines. • A well-stocked first aid kit shall be maintained by	Safety and Health Officer, Safety Health and Environment	• Workers using personal protective equipments.

	qualified personnel. • Report any accidents/ incidences and treat and compensate affected workers. • Provide sufficient and suitable sanitary conveniences which should be kept clean.	Manager	• Availability of a well-stocked first aid box. • Clean sanitary facilities.
Fauna	• A fauna survey will be conducted to determine the effect of fragmented habitat to fauna species should the need arise. • No animals shall be killed, capture or harmed in any way.	Personnel on duty, Environmental Officer, Safety Health and Environment Manager	• Regular monitoring of any unusual signs of animal habitat.
Alien invasive plants	• Ensure vehicles and equipment are clean of invasive plants and seeds. • Eradicating alien plants using area management plan. • Contain neighboring infestations and restrict movement of invasive plants from adjacent lands • Educating everyone on site on types of invasive plants.	Environmental Officer, Environmental Manager	• Regular monitoring of any signs of alien plants.
Loss of vegetation	• Environmental considerations will be adhered to at all times • outcrops and vegetation sensitive area will be avoided. • The movement of vehicles will be restricted to certain tracks only.	Environmental Officer, Safety Health and Environment Manager	• Warning signs on site • Restored vegetation

Operational Phase			
Environmental /Social Impact	**Proposed mitigation measures**	**Responsibility**	**Monitoring plan**
Noise pollution	• All noise should be kept within reasonable levels. • Employees and neighbors should be notified of any scheduled unusual noise. • Regular maintenance of vehicles, equipment and heavy machinery. • Workers should be provided with personal hearing protection if working in a noisy environment.	All employees, Safety Health and Environment Manager Environmental Officer	• Amount of noise produced
Visual	• Environmental considerations will be adhered to at all times before clearing roads and excavations	Safety Health and Environment Manager Environmental officer	• Employees to be trained on how to minimize visual impacts
Fauna	• Some habitat areas will be avoided where possible. • A fauna survey will be conducted to determine the effects of fragmented habitat game species should the need arise. • No animal shall be kept, captured, killed or harmed in any way.	All employees, Environmental officer Safety Health and Environment Manager	• Regular monitoring of unusual signs of animal habitat.
Alien invasive plants	• Ensure debris is properly disposed of. • Ensure vehicles and equipment are clean of invasive plants and seeds. • Contain neighboring infestations and restrict movement of invasive plants from adjacent lands • Educating everyone on site on types of invasive plants. Eradicating alien invasive plants by using an area management plan.	Safety Health and Environment Manager Environmental officer Foreman and personnel on duty	• Regular monitoring of any signs of alien invasive plants

Loss of vegetation	• Environmental considerations will be adhered to at all times before clearing roads, trenching and excavations. • Paths and roads will be aligned to avoid root zones. • Permeable materials will be used where ever possible. • Movement of vehicles in vegetation sensitive areas will be avoided and restricted to certain tracks only.	Safety Health and Environment Manager	• Restored vegetation
Solid waste	• Minimize solid waste generated on site. • Encourage segregation of waste on site • Debris should be collected by waste collection contractor. • Excavated waste should be piled at a designated approved location.	Safety Health and Environment Manager Environmental Officer All foremen, personnel on duty	• Amount of waste on site. • Availability of dust bins, waste collection point.

Oil leaks and spills	• Machinery should be well maintained to prevent oil leaks. • Contractors should have a designated area where maintenance is carried out and should be underlain by impermeable layer. • Workshops should be bounded by concrete	Environmental Officer, Safety Health and Environment Manager, Foremen, personnel duty	• No observed/detected oil spills and leaks on site
First aid	• A well-stocked first aid kit shall be maintained by qualified personnel.	Safety and health Officer, Safety Health and Environment	• Contents of the first aid kit.

		Manager	
Fire preparedness	• Fire incidence firefighting emergency response plan. • Ensure all firefighting equipments are always available regularly maintained, serviced and inspected. • Fire hazard signs and directions to emergency exit, route to follow and assembly point in case of any.	Health safety officer Safety Health and Environment Manager	• Fire signs put up in strategic places. • Availability of well-maintained firefighting equipments.
Environmental health and safety	• Train workers on personal safety and disaster preparedness. • Provide sufficient and suitable sanitary conveniences which should be kept clean. • Conduct annual health and safety audits. • Report any accidents/incidences, treat and compensate affected workers. • A well-stocked first aid kit shall be maintained by qualified personnel.	Safety Health and Environment Manager	• Provide sanitary facilities. • Copies of annual audit.

Decommissioning phase			
Impacts	**Proposed mitigation measures**	**Responsibility**	**Monitoring plan/Indicator**
Noise and air pollution	• Personal hearing protection must be worn by workers in noisy section. • Regular maintenance of vehicles, equipments, heavy machinery on regular basis. • Workers should be provided with dust mask to wear at all times. • Decommissioning work can only be carried out during the day.	Health safety and Environment Manager Environmental Officer	• Amount of noise and dust generated
Disturbed physical environment	• Undertake a complete a complete environmental restoration programme and introducing appropriate vegetation for ground stabilization.	Health safety and Environment Manager Environmental Officer	
Solid waste	• Solid waste should be collected by contracted waste collection company.	Health safety and Environment Manager Environmental Officer	• Amount of waste on site. • Presence of well-maintained receptacles and central collection point.
Occupational health and	• Train workers on personal safety and how to handle equipments and machines.	Health and safety officer,	• Workers using protective

safety	• Provide personal protective equipments (PEE). • A well-stocked first aid kits shall be maintained by qualified personnel. • Demarcate area under decommissioning.	Environmental Officer, Health safety and Environment manager	equipments. • Availability of a first aid box.

7.7 Monitoring, reporting and corrective action

7.7.1 Monitoring of EMP

Monitoring of the EMP performance for the proposed project by the Contractor emphasizes early detection, reporting, and corrective action. It is divided into three parts, namely:

- Monitoring of project activities and actions to be undertaken by the Environmental Officer and the Safety Health Manager appointed by the proponent.
- All incidences and situations which have the potential of jeopardizing compliance of statutory provisions as well as
  provisions of this EMP should be reported to the environmental manager and ultimately the executive management committee.
- The Environmental officer and safety and health manager shall take corrective prompt measures, adequate and long-lasting in addressing non-compliance activities.

To ensure compliance of the implementation of the EMP, it is highly recommended that a safety health and environment manager is appointed by the proponent to ensure the implementation of the EMP.

7.7.2 Inspections and Audits

During the life of the mine, performance against the EMP commitments will need to be monitored and corrective action taken where necessary, in order to ensure compliance with the EMP and relevant environ-legal requirements.

7.7.2.1 Internal Inspections/Audits

The following internal compliance monitoring programme will be implemented:

1. Project kick-off and close-out audits will be conducted on all contractors. This applies to all phases, including drilling contract work during operations:

- Before a contractor begin any work, an audit will be conducted by the applicable phase site manager to ensure that the EMP commitments are included in Contractors' standard operating procedures (SOPs) and method statements.
- Following completion of a Contractors work, a final close-out audit of the contractor's performance against the EMP commitments will be conducted by the applicable phase site manager.

2. Monthly internal EMP performance audits will be conducted during the construction, operation and decommissioning phases.
3. Ad hoc internal inspections can be implemented by the applicable manager at his/her discretion, or in follow-up to recommendations from previous inspection/audit findings.

7.7.2.1 External Audits

- At the end of each project phase, and annually during the operational phase, an independently conducted audit of EMP performance will be conducted.
- Specialist monitoring/auditing may be required where specialist expertise are required or in order to respond to grievances or authorities directives.
- Officials from the DEA may at any time conduct a compliance and/or performance inspection of quarrying operations. The proponent will be provided with a written report of the findings of the inspection. These audits assist with the continual improvement of the quarrying project and the proponent will use such feedback to help improve its overall operations.

7.7.3 Documentation

Records of all inspections/audits and monitoring reports will be kept in line with legislation. Actions will be issued on inspection/audit findings. These will be tracked and closed out.

7.7.4 Reporting

Environmental compliance reports will be submitted to the Ministry of Environment, Forestry on a bi-annual basis.

7.7.5 Environmental management system framework

Environmental Management System (EMS) will be established and implemented by the proponent and their Contractors. This subchapter establishes the framework for the compilation of a project EMS. The safety, health and environment manager will maintain a paper based and/or electronic system of all environmental management documentation. These will be divided into policy and performance standards &Enviro legal documentation.

Enviro-Legal Documentation

A copy of the approved environmental assessment and EMP documentation will always be available by the proponent. Copies of the Environment Clearance Certificate and all other associated authorizations and permits will also be kept onsite with the safety, health and environment manager. In addition, a register of the legislation and regulations applicable to the project will be maintained and updated as necessary.

Impact aspect register

A register of all project aspects that could impact the environment, including an assessment of these impacts and relevant measures is to be maintained. This Draft EMP identifies the foreseeable project aspects and related potential impacts of the proposed project, and such forms the basis for the aspect Impact Register with the project activities. It should however be noted that during the life of the project additional project aspects and related impacts may arise which would need to be captured in the Aspect-Impact Register.

7.7.6 Procedures and Method Statements

In order to affect the commitments contained in this EMP, procedures and method statements will be drafted by the relevant proponent (safety health and environment manager) and Contractors. These include, but may not be limited:

- Standard operating procedures for environmental action plan and management programme execution.
- Incident and emergency response procedures.
- Auditing, monitoring and reporting procedures, and
- Method statements for EMP compliance for ad hoc activities not directly addressed in the EMP action plans.

All procedures are to be a version controlled and signed off by the safety health and environment manager. In addition, knowledge of procedures by relevant staff responsible for the execution thereof must be demonstrable and training records maintained.

Site Map

An up to date map of the he project area indicating all project activities is to be maintained. In addition to the project layout, the following detail must be depicted:

- Materials handling and storage;
- Waste management areas (collection, storage, transfer, etc.);
- Sensitive areas;
- Incident and emergency equipment locations; and
- Location of responsible parties.

Environmental management schedule

A schedule of environmental management actions is to be maintained by the applicable phase site managers and/or relevant Contractors. A master schedule of all such activities is to be kept up to date by the manager. Scheduled environmental actions can include, but are not limited to:

- Environmental risk assessment;
- Environmental management meetings;
- Waste collection;
- Incident and emergency response equipment evaluations and maintenance
- Environmental training;
- Stakeholder engagement;
- Environmental inspections and
- Auditing , monitoring and reporting

7.7.7 Change Management

The environmental management schedule must have a procedure in place for change management. In this regard, updating and revision of environmental documentation, of procedures and method statements, actions plants etc. will be conducted as necessary in order to account for the following scenarios:

- Changes to standard operating procedures (SOPs);

- Changes in scope;
- Ad hoc actions;
- Changes in project phase; and
- Changes in responsibilities or roles

All documentation will be version controlled and require sign off by the applicable phase site managers.

Environmental code of conduct

The Code of Conduct outlined in this section of the EMP applies to, subcontractors, visitors, permanent and temporal workers. Therefore, anybody within the boundaries of the stock holding site must adhere to the Environmental Code of Conduct as outlined in this section of the EMP.

The safety health and environment manager will implement on-site environmental guidelines and has the authority to issue warnings as well as discipline any person who transgresses environmental rules and procedures. Persistent transgression of environmental rules will result in a disciplinary hearing and thereafter continued noncompliance behavior will result in permanent removal from the construction sites.

7.8 Site closure, decommissioning and rehabilitation

7.8.1 Closure Assumptions

When the life cycle of a facility has been exhausted, the proponent shall consider decommissioning the facility. This closure plan has been developed based on limited available information including environmental data. Some of the information currently available may need to be supplemented during the operational period. Therefore, several assumptions were made about general conditions, and closure and rehabilitation of the facilities at the site to develop the proposed closure actions. As additional information is collected during operations, these assumptions will be reviewed and revised as appropriate. A site inspection will be held after completion of the project to determine the nature and scope of the rehabilitation work to be undertaken. The rehabilitation will be done to the satisfaction of both the proponent, METF and the General Manager of Roads and building control, Walvis Bay Municipality.

The assumptions used to prepare this plan include the following:

- The proposed project site will be adhered to minimize the potential impacts.
- Vegetation establishment will be in line with a project area's indigenous vegetation and all alien and/or exotic vegetation should be removed.

- Building infrastructure will be retained for closure /end of the life of the project as necessary.
- All hazardous and domestic waste will be transported offsite for disposal in licensed landfills.
- No roads are anticipated to be constructed to access the site; existing roads will be used as far as possible. Where access tracks have been developed, these will be rehabilitated and closed as part of normal closure actions.

A full decommissioning plan should be developed within the first 24 months of operation, however the following management actions are recommended as a minimum.

Infrastructure

Consultation shall be made with Walvis Bay Municipality to determine whether the developed infrastructure could be useful if left in place. In this instance, the transfer of the responsibility of maintaining such facility shall be considered to avoid any conflicts between interested parties.
Where practicable, equipment and materials with value not needed for post-closure operations will be sold and or removed from the site. Provision shall be made to ensure that this infrastructure or equipment does not pose a safety hazard. Equipment with scrap or salvage value will be removed from the site and sold to recyclers.

Remediation of Contaminated Areas

All soil, contaminated with hydrocarbons, spilled copper concentrate will be identified, excavated, if possible, to at least 200 mm below the contaminated zone and then treated.

- All potentially contaminated soils are to be identified and demarcated for later remediation; and
- Removed soils will be managed as determined by the nature and extent of the contamination.
- All tanks, pipes and sumps containing hydrocarbons to emptied prior to removal to ensure no hydrocarbon/chemical residue remains; and
- All equipment in which chemicals have been stored or transported will be cleaned and disposed of in a suitable disposal facility.

Waste Management

Waste management activities will include:

- Hazardous waste will be managed handled, classified and disposed.

- Non hazardous substances will be disposed in the nearby landfill sites.
- Scrap and waste steel will be sold to recyclers. It may be necessary to fence temporary salvage yards for security reasons, particularly where these are located close to public roads.

Socio- economic consideration

The proponent shall work closely with the local communities to reduce the negative impacts associated with termination of employment at the end of the operational phase by ensuring that employees are fully compensated, and well informed about decommissioning and how it will affect them well before the project finally closes.

8. Conclusion and recommendations

The project entails construction of the storage facility and associated infrastructure as well the construction or appropriate upgrading of existing infrastructure such as electricity, water and sewerage. Copper concentrate in sealed bags and dimension stone blocks will be loaded in trucks and lockable containers to storage. The facility will be concrete walled with covered roof and paved with concrete. All the transfer points will be fitted with dust extraction/ suppression system to handle dust. Walvis Bay, Farm 38 conforms to the proponent's location strategy as it is in close proximity to the Walvis Bay Port the proposed site is a 20, 000 m^2 non pristine barren land with no visible fauna and flora, sufficient enough to accommodate the proposed storage facility.

During the operational phase the impacts bio-physical impacts were assessed to have a long-term negative effect without mitigation. The impacts will however be significantly reduced when the recommended mitigation measures in the scoping report and environmental management plan (EMP) are implemented. The above Environmental Management Plan, if properly implemented, will help to minimize adverse impact of the proposed activities on the environment. Where impacts occur, immediate action must be taken to reduce the escalation of effects associated with these impacts. Based on this study conducted most of the construction phase impacts were deemed to have a short-term negative impact without mitigation which can be significantly reduced with the mitigation measures proposed. The impacts on the quality of life of the residents and on the infrastructure development are deemed to be high positive.

The Environmental Management Plan should be used as an on-site reference document during all phases of the proposed project, and auditing should take place in order to determine compliance with the EMP for the proposed site. Parties responsible for transgression of the EMP should be held responsible for any remediation that may need to be undertaken. The EMP Consultants are confident that the potential negative impacts associated with the proposed activities on site can continue to be mitigated by effectively implementing the recommended management action measures and their monitoring. This report covers the environmental assessment for the construction, operation, operation, ongoing monitoring and rehabilitation and decommissioning and closure of the Farpoint stock-holding facility and supporting infrastructure. It should be viewed as a framework for integrating mitigation measures and applicable legal tools to ensure both compliance and sustainability.

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Appendix C: Registered IAP's

Name	Organization	Tel	Email
B. Korhs	Earth life Namibia	061-2022041	earthl@iway.na
Asino Kristofina	Walvis Bay Municipality		kasino@walvisbaycc.org.na
Cronje Grane	Walvis Bay resident		cronje.grane@rennies.com.na
C. Sisamu	Nampower	061-2052350	Calvin.Sisamu@nampower.com.na
C. Tubalike	MURD	061-2975062	ctubalike@murd.gov.na
E de Paauw	Roads Authority - Specialised road Legislation, Advise & Compliance	061-2847 027	dePaauwe@ra.org.na
B Nangombe			bnangombe@erongored.com.na
E Muremi	Ministry of Health and Social Services Director Khomas Region	061-2035 001	Elizabeth.Muremi@mhss.gov.na
Esmerialda Strauss	CHIEF FORESTER National Botanical Research Institute (NBRI)	061-2022017	Esmerialda.Strauss@mawf.gov.na
F Kreitz	Namibian Environment and Wildlife Society - Media, website and newsletter	061-306450	Information@NEWS-Namibia.org;
F. Sikabongo	MET - Deputy Director of Directorate ofEnvironmental Affairs	061-2842701	frederick.Sikabongo@meft.gov.na
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