

**ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE PROPOSED
STOCKHOLDING FACILITY FOR COPPER CONCENTRATE AND
LITHIUM PETALITE AT ERF 3757, GOBABEB STREET, WALVIS BAY**



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February 2023

DOCUMENT DESCRIPTION

PROJECT NAME: STOCKHOLDING FACILITY FOR COPPER CONCENTRATE AND LITHIUM PETALITE.

LOCATION: ERF 3757, GOBABEB STREET, WALVIS BAY

DOCUMENT: ENVIRONMENTAL MANAGEMENT PLAN (EMP)

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Table of content

LIST OF ACRONYMS.....	4
1. INTRODUCTION AND BACKGROUND	5
1.1 Introduction	5
1.2 Purpose of the EMP	6
1.3 EMP Methodology.....	7
2. DESCRIPTION OF ACTIVITIES.....	8
2.1 Locality setting and process flow.....	8
3. ROLES AND RESPONSIBILITIES	9
3.1 Project involvement.....	9
3.2 Responsibilities	10
3.2.1 The Proponent:.....	10
3.2.2 Environmental Control Officer (ECO)	10
3.2.3 The Contractor and Sub-contractors	11
3.2.4 Authorities	11
a). Local Authority: Walvis Bay Municipality.....	11
b) Competent Authority: Ministry of Mines and Energy.....	11
4. ENVIRONMENTAL MANAGEMENT REQUIREMENTS.....	12
4.1 Environmental awareness training	12
4.2 Record keeping	12
4.3 Enforcements: Non-compliance and penalties	12
4.4 Environmental Reports.....	12
4.5 Enforcement.....	12
4.6 Method statements.....	13
5. LEGAL REQUIREMENTS	14
6. MITIGATION MEASURES FOR THE IDENTIFIED IMPACTS	16
7. ENVIRONMENTAL MANAGEMENT SYTEM (EMS).....	22
8. COMPLIANCE MONITORING.....	23
9. EMERGENCY RESPONSE PLAN	25
10. CONCLUSION	26
11. ANNEXURES.....	27
Annexure 1: Environmental Compliance Monitoring Checklist	27
Annexure 2: Fire Response Plan.....	27
Annexure 3: MSDS Copper Concentrate.....	27

Annexure 4; MSD Lithium Petalite..... 27
Annexure A: Environmental Compliance Monitoring Checklist..... 28
Annexure B: Fire response Plan..... 29

LIST OF ACRONYMS

DEA:	Directorate of Environmental Affairs
EAP:	Environmental Assessment Policy
EIA:	Environmental Impact Assessments
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
EMS:	Environmental Management System
HSEQ:	Health, Safety & Environment Quality System
I&APs:	Interested and Affected Parties
IBC:	Intermediate Bulk Container
MEFT:	Ministry of Environment, Forestry and Tourism
MSDS:	Material Safety Data Sheet
PPE:	Personal Protective Equipment

1. INTRODUCTION AND BACKGROUND

1.1 Introduction

Beucorp Trading cc, hereinafter referred to as the “Proponent” intends to establish a stockholding facility for copper ore that has been processed into a powdered form to increase the concentration of the copper content. The material is sourced from suppliers in Zambia, Botswana, Zimbabwe, and Namibia, on trucks with either flatbed trailers or containers. The material is packaged in 1MT bags, similar to the ones used to transport sugar. These bags are then loaded on trucks and sent from their origin to the warehouse in Walvis Bay for temporary while waiting for a boat. Once the material arrives at the facility, it will be offloaded from the trucks with forklifts and stacked in the warehouse. If the warehouse is full, some bags will keep in the yard under black plastic sheeting.

This Environmental Management Plan (EMP) was prepared in line with Section 8 (j) of the EIA Regulations (GN 30 of February 2012), and the proponent’s terms of reference. The EMP contains aspects of the proposed management and mitigation measures to be taken to address the negative environmental impacts and enhancement measures for the positive environmental impacts identified in the environmental scoping report. It also addresses the need for compliance monitoring of identified significant environmental impacts.

The EMP is therefore important in ensuring that the management actions arising from the EIA processes are clearly defined and implemented through all phases of the project life cycle. The EMP is also a dynamic document that allows for the evaluation of the success or failure of management actions and to carry out reorientation of the relevant actions if deemed necessary.

1.2 Purpose of the EMP

The EMP is an environmental tool that is used to ensure that undue or reasonably avoidable adverse caused by the proposed project are minimized or prevented and the positive benefits of the project are enhanced. An EMP is therefore important in for ensuring that the management actions arising from Environmental Impact Assessment (EIA) processes are clearly defined and implemented through all phases of the project life cycle. All personnel taking part in the establishment and operations of the facility should be made aware of the contents of the EMP, so as to plan the relevant activities that the project will include accordingly and in an environmentally sound manner.

The objectives of an EMP are:

- Ensuring compliance with regulatory stipulations and guidelines which may be local, national or international.
- Define details of who, what, where and when environmental management and mitigation measures are to be implemented.
- Formulate measures which will mitigate adverse impacts on various environmental components, protect environmental resources where possible, and enhance the value of environmental components where possible; and
- Providing feedback for continual improvement in environmental performance.

1.3 EMP Methodology

The stipulated environmental impact assessment procedure in terms of the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 was followed. The following key activities and tasks have been undertaken as part of the EIA and EMP development process, namely to:

- Solicited initial input from main stakeholders. This is essential toward the development of a sound plan. Since no resource sits in isolation, an environmental management plan can affect a number of other parties. For the best adherence and acceptance of a plan, input is needed to address concerns early in the planning process.
- Identify the problems and or questions associated with the facility. Clearly defined objectives were identified in order to remain centered on a management plan. Only in this way can the success of this environmental management plan be gauged.
- Made a list of applicable criteria, standards and principles for construction as required by legislation, regulation, policies and etc. As standards include criteria to fit various types of projects, much of the information is often irrelevant to any particular one. Went through any standards or reference guides to be complied with and marked all requirements applicable to each situation.
- Established the extent of the management plan and what the client must do on its own. It is easy for a management plan to end up in someone's hands and never be executed. Inform the client that creating the plan is an iterative process requiring routine correspondence to tailor it to Project Contractor's specific needs.

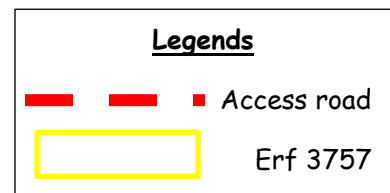
2. DESCRIPTION OF ACTIVITIES

2.1 Locality setting and process flow.

Erf 3757 is located in the Light Industrial area of Walvis Bay Extension 1 along the Gobabeb Street which is linked to the main road Hanna Mupetami connected to the Port of Walvis Bay. It is located on the following coordinates -22.9512175" S and 14.5227301" E.



Figure 1: Locality



3. ROLES AND RESPONSIBILITIES

3.1 Project involvement

The proposed project requires a multitude of administration of various role players to ensure that the proposed infrastructure is planned & designed, constructed, operated, and maintained in an environmentally sound manner.

Table 1: Project Involvement

NO.	SPECIFIC PROJECT ROLE	ADDRESS AND CONTACTS
1.	Proponent	BEUCORP TRADING CC Mr. Dian Tel: +264 (081) Email: w
3.	Environmental Assessment Practitioner	Green Gain Consultants cc Mr. Joseph Amushila Cell: +264811422927 Email: info@greengain.com.na
4.	Local Authority	Municipality of Walvis Bay Civic Center Nangolo Mbumba Drive P/Bag 5017 Tel: +264 (061) 201 3111
5	Competent Authority	Ministry of Mines and Energy Department: Petroleum Tel: +264 (061) 284 2746

3.2 Responsibilities

It is the core responsibility of the proponent to ensure the successful implementation of this EMP and any condition to be imposed by the Ministry of Environment and Tourism. The implementation of the EMP also requires the involvement of authorities, each with specific responsibilities to ensure that the development is operated in an environmentally sensitive manner.

3.2.1 The Proponent:

Responsibilities

- a) Implement the final EMP after approval by DEA and ensure the project comply with the conditions therein.
- b) Ensure environmental training and awareness of the EMP to all contractors, sub-contractors and employees.
- c) Notify MEFT and authorities of any proposed changes to the proposed project.
- d) Ensure that appropriate compliance monitoring is executed
- e) Handle grievances in the prescribed manners as outlined in Section 9.
- f) Appoint an Environmental Control Officer (ECO)

3.2.2 Environmental Control Officer (ECO)

The proponent should appoint an ECO to oversee the implementation of the EMP during site establishment, operation, and possible decommissioning project phase. The ECO can be an employee of the proponent or an outside/independent EAP. The ECO should be responsible for the following tasks.

- Ensure that all contractor and sub-contractors are complying with the content of this EMP.
- Keep record of incidences during and take corrective actions i.e., issuing of penalties in case of transgressions etc. during project implementation.
- That all environmental impacts are managed according to the environmental principles of avoiding, minimizing, mitigating, and rehabilitation as contained in this EMP.
- Conduct monitoring and review of the on-site environmental management and implementation of the EMP by the Contractor and sub-contractors.
- Audit the implementation of the EMP on a regular basis
- Compile and submit an Environmental Reports (annually) to the Authority

3.2.3 The Contractor and Sub-contractors

It is expected that various contractors and sub-contractors will be appointed at various stages and for various tasks during different phases of this project i.e., delivery trucks, maintenance contractors etc. All appointed contractors and sub-contractors involved in the project shall ensure to comply with the EMP and its conditions, thus the proponent must ensure that a copy of the EMP is given to all contractors involved. The contractor upon receiving this EMP should ensure:

- To undertake their activities in an environmentally sensitive manner and within the context of this EMP.
- To undertake good housekeeping practices during duration of their activities; and
- To ensure that adequate environmental awareness training takes place in the language of their employees.

3.2.4 Authorities

a). Local Authority: Walvis Bay Municipality

Provide authorization for the proposed activities by

- Issuing Consents for the ECC application
- Approve Building Plan and site layout
- Issue Fitness Certification in terms of the Local Authorities Act of 1190
- Conduct monitoring during site establishment and operation phase
- Ensure the operation of the activities are within the Walvis Bay Town Planning Scheme No.35
- Notify the proponent of any changes to land uses thereof and address dispute that may arise between the proponent (occupier) and adjacent properties owners.

b) Competent Authority: Ministry of Mines and Energy

Provide authorization through certifications and issuing permits and renewals thereof, required in terms of the Petroleum Products and Energy Act No. 13 of 1990 and its Regulations.

4. ENVIRONMENTAL MANAGEMENT REQUIREMENTS

The successful implementation of this EMP is depends on various factors, training and awareness, a good record keeping, enforcements and monthly reporting.

4.1 Environmental awareness training

All employees, contractors and sub-contractors involved in any work at the project should be briefed on their obligation towards environmental protection and methodologies in terms of the EMP prior to work commencing. The briefing should be done by the proponent prior to any work in the form of an onsite talk. Record of such trainings should be kept.

4.2 Record keeping

There should be an up-to-date filing system for the project whereby method statements, environmental incidents report, training records, audit reports and public complaints register are kept. It is advised that photographs of the site should be taken as a visual reference. These records should be kept for a minimum of **two (2) years**.

4.3 Enforcements: Non-compliance and penalties

This EMP upon approval by MET shall be considered a legally bidding. In cases of transgressions and non-compliance to the EMP, the transgressor should be liable to a penalty fine. Transgressions should be recorded in a dedicated register and be filed. The Proponent shall issue the penalties in terms of the severity of the environmental damages.

Adherence to this EMP during the operation of the project will ensure that the environmental impacts associated with the project will be mitigated to a greater extent thus promoting sustainable development. The commitment and co-operation of the identified responsible person(s) will ensure effective implementation of the EMP.

4.4 Environmental Reports

The proponent shall, in the project completion report, indicate the environmental performance and matter of incidental. The EAP shall conduct regular monitor of project activities during all project phases and keep records. These records may be required by the competent authority when deemed necessary.

4.5 Enforcement

This updated EMP, upon approval by MEFT shall be a legally binding document, thus, the commitment and co-operation of the identified responsible person(s) will ensure effective implementation. Moreover, adherence to this EMP will ensure that the environmental impacts associated with the project will be mitigated to a greater extent thus promoting sustainable development.

4.6 Method statements

The method statements are required especially during the operation phase to describe the scope of work intended by the proponent. The method statement will enable the proponent in devising any mitigation measures, which would minimize environmental impact during the scheduled tasks. The method statements should clearly stipulate mitigation methods of the intended works, against which the employee's performance will be measured. In this case, the following method statements will be necessary during the construction phase:

- Details of the activities onsite
- Handling procedures.
- Materials and equipment to be used.
- How and where materials will be stored.
- The containment of accidental leaks or spills as prescribed by this EMP
- Timeline and location of activities; and
- Any other information deemed necessary by the ECO/RE.

5. LEGAL REQUIREMENTS

As part of implementation of this EMP, the proponent must comply with the requirements of various national legislations and municipal by-laws as outlined in the Scoping Report and also briefly presented here below.

Table 2: Applicable National Laws

LEGISLATION	PROVISION AND REQUIREMENTS
Constitution of the Republic of Namibia (1990)	<p>National objectives</p> <ul style="list-style-type: none"> -Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity.
Local Authorities Act, No. 23 of 1992 as amended	<p>Provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters.</p> <p>According to Section 94 of the Act, the collection and disposal of waste is the responsibility of local and regional authorities. The Act also gives power to the Local Authorities to establish by-laws.</p>
Pollution Control and Waste Management Bill, 2003	<p>This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management.</p> <p>The bill provide framework for a multitude administration on pollution control and waste management in the country. Each authority identified by the bill shall play its respective roles.</p>
Environmental Management Act, No.07 of 2007	<p>Ensuring that the significant effects of activities on the environment are considered carefully and in time. To promote the sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters affecting the environment.</p> <p>The proponent shall inform the competent authority of any changes to the proposed school facilities, to see if an EIA is required or not.</p>
Public Health and Environmental Act, 2015	<p>The objectives of the PHE Act are to;</p> <ul style="list-style-type: none"> • Promote public health and wellbeing • Prevent injuries, diseases and disabilities • Protect individuals and communities from public health risks • Encourage community participation in order to create a healthy environment • Provide for early detection of diseases and public health risks <p>Section 2 requires that a). “Every local authority must take necessary reasonably and applicably measures to maintain its local authority area at all times in a hygienic and clean condition” b). Prevent occurrence of a health nuisance, unhygienic condition, an offensive condition or any condition which could be</p>

	harmful or dangerous to the health of a person within its local authority or the local authority area of another local authority”
National Labour Act (No 11 of 2007)	<p>To establish a comprehensive labour law for all employers and employees; to entrench fundamental labour rights and protections. Regulate basic terms and conditions of employment; ensure the health, safety and welfare of employees; to protect employees from unfair labour practices; to regulate the registration of trade unions and employers’ organisations; to regulate collective labour relations; to provide or the systematic prevention and resolution of labour disputes.</p> <p>Any employment provided whether by the proponent or by contractor at this site i.e., Security Services must be in accordance with the Labour Act.</p>
Employment Service Act, 8 of 2011	<p>To provide for the establishment of the National Employment Service; to impose reporting and other obligations on certain employers and institutions; to provide for the licensure and regulation of private employment agencies; and to deal with matters incidental thereto.</p> <p>Any employment provided whether by the proponent or by contractor at this site must be in accordance with the Labour Act.</p>
Water Resources Management Act 2004	<p>This Act provides provision for the control, conservation and use of water for domestic, agricultural, urban and industrial purposes. In addition, the Act clearly gives provision that pertain with license or permit that required abstracting and using water as well as for discharge of effluent.</p> <p>The effluent of human waste under this framework is the main focus; the use of mobile toilets during construction phase should be properly positioned. Permanent ablution facilities for the school should be connected to the septic tank and a Wastewater discharge permit should be obtained from MAWF. No discharge of raw wastewater in the open environment is allowed</p>
Atmospheric Pollution Prevention Ordinance, no. 11 of 1976	<p>To provide for the prevention of the pollution of the atmosphere, and for matters incidental thereto. The Ordinance deals with administrative appointments and their functions; the control of noxious or offensive gases; atmospheric pollution by smoke, dust control, motor vehicle emissions; and general provisions.</p> <p>According to the Ordinance, the Local Authority shall control and prevent atmospheric air pollution or emission of noxious or offensive gases by smoke.</p>
Hazardous Substance Ordinance of 1974	<p>This Ordinance provides for the control of toxic substance and thus also relevant for pollution control. It covers for the manufacturing, sale, use, disposal, dumping, importing and exporting of hazardous waste.</p> <p>Any use of hazardous substance must be in compliance with this ordinance</p>

This is not the exhaust list. Provision of the relevant legislations listed in the Scoping report should be complied with.

6. MITIGATION MEASURES FOR THE IDENTIFIED IMPACTS

The proponent should play a pivotal role in implementing this EMP. This section provides a manner in which the EMP is to be implemented and also outlining responsibilities of all parties involved perform their respective roles in accordance with this EMP.

Table 3: Proposed mitigation measures during establishment phase

Aspect	Potential Impacts	Mitigation Measures	Responsibilities
Legal Compliance	Non-compliance to relevant legislation may affects the operation of the facility in the long run.	<ul style="list-style-type: none"> • Ensure compliance to relevant legations as listed in Table 2 	Proponent
Dust and atmospheric pollution	<ul style="list-style-type: none"> • Dust maybe generated during construction works 	<ul style="list-style-type: none"> • The site is already in existence thus there are no major construction works expected. However, in case of any construction works, the following should be implemented. <ul style="list-style-type: none"> ○ Sprinkle the construction site in case of excessive dust. ○ The concrete batching works shall be always kept neat and clean. No batching activities shall occur on unprotected substratum of any kind. ○ Contaminated water from batching areas shall not be allowed to overflow but shall be collected, stored, and disposed of at a site approved by the Municipality. ○ Unused cement bags shall be stored in weatherproof containers to prevent windblown cement dust and water contamination during rainfall or runoff events. 	Proponent

Soil contamination	<ul style="list-style-type: none"> • Soil can easily be contaminated from material spills and leaks 	<ul style="list-style-type: none"> • No direct discharge of pollution (wastewater or solid waste) into the open environment. • Vehicles with leaking oil/pollutants should be provided with drip trays. • Existing ablution facilities will be utilized during construction. • All contaminated soil should be collected and disposed of at the Municipal landfill site 	Proponent
Waste generation	<ul style="list-style-type: none"> • Only limited quantity of waste will be generated during construction or site refurbishment 	<ul style="list-style-type: none"> • All waste generated must be contained and properly dumped at the Walvis Bay landfill site. 	Proponent
Traffic Management	<ul style="list-style-type: none"> • Movement of traffic in and out of the site 	<ul style="list-style-type: none"> • Vehicles must be driven by authorized drivers. • All vehicles should be driven on the minimum driving speed in town (60km/hr). 	Drivers
Noise and Vibration Management	<ul style="list-style-type: none"> • Noise will be generated from vehicular movement and construction works. 	<ul style="list-style-type: none"> • Provide all employees with required and adequate personal protective equipment (PPE). • All works should be limited to daytime (07-18:00) 	Proponent
Occupation health and Safety	<ul style="list-style-type: none"> • Employees are exposed to different types of health risks and hazards 	<ul style="list-style-type: none"> • Clearly label dangerous and restricted areas as well as dangerous equipment and products. • All Health and Safety standards specified in the Labour Act should be complied with. 	Proponent
Workers' sanitation	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • Existing ablution facilities and showers will be used. • Ensure safe drinking water for employees 	Proponent

Table 4: Proposed Mitigation Measures: Operation

Environmental Aspect	Potential impact	Mitigation Measures	Responsibilities
Air Quality	<ul style="list-style-type: none"> Air quality maybe compromised by excessive dust emission 	<ul style="list-style-type: none"> Personnel issued with appropriate masks where excessive dust or vapours are present. Employees should be coached on the dangers of dust exposure. 	Proponent
Waste generation	<ul style="list-style-type: none"> Operation phase will generate different types of waste 	<ul style="list-style-type: none"> Ensure adequate disposal storage facilities are available on site. Waste should be disposed of regularly and at the Municipal landfill site. Hazardous material (empty chemical containers, contaminated rugs, paper, water, and soil) should be kept separate from other types of waste and disposed of accordingly. The spill catchment traps, and oil water separator should be installed onsite, and surfactants (soap) may not be allowed to enter the oil water separator. See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers. Waste reduction measures should be implemented and all waste that can be re-used /recycled must be kept separate. 	Proponent
Noise	<ul style="list-style-type: none"> Noise maybe generated from the movement of delivery trucks, and 	<ul style="list-style-type: none"> Follow World Health Organization (WHO) guidelines on maximum noise 	Proponent

	<p>during material handling (offloading and loading)</p>	<p>levels (Guidelines for Community Noise, 1999) to prevent hearing impairment.</p> <ul style="list-style-type: none"> • Keep volume of public address systems on a level where neighbours are not impacted on. • Hearing protectors as standard PPE for workers in situations with elevated noise levels. • Provide employees with Personal Protective Equipment. • Follow the Regulations of minimum employment health requirements outlined in the National Labour Act, 11 of 2007 and the World Health Organization (WHO) guidelines on maximum noise levels (Guidelines for Community Noise, 1999) to prevent hearing impairment. • All machinery must be regularly serviced to ensure minimal noise production. • Hearing protectors as standard PPE for workers in situations with elevated noise levels. 	
<p>Fire</p>	<ul style="list-style-type: none"> • Risk of fire is minimal 	<ul style="list-style-type: none"> • A holistic fire protection and prevention plan is needed. This plan must include an emergency response plan, firefighting plan, and spill recovery plan. • Maintain firefighting equipment, good housekeeping, and personnel training (firefighting, fire prevention and responsible housekeeping practices). 	<p>Proponent</p>

		<ul style="list-style-type: none"> • Ensure all chemicals are stored according to MSDS. • Maintain regular site, mechanical and electrical inspections, and maintenance. • Clean all spills / leaks. 	
Traffic Impact	<ul style="list-style-type: none"> • Movement of vehicles in and out of the site 	<ul style="list-style-type: none"> • Erect clear signage regarding access and exit points at the facility. • Delivery trucks should be clearly marked and should not be allowed to obstruct any traffic in surrounding streets. • Ensure sufficient parking spaces for visitors and staff members. • The placement of signs to warn and direct traffic will mitigate traffic impacts. 	Proponent
Occupational Health and Safety	<ul style="list-style-type: none"> • Employees are exposed to different types of health risks and hazard i.e., accidents, injuries, chemical exposure etc. 	<ul style="list-style-type: none"> • 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. • Implement and maintain an integrated health and safety management system, to act as a monitoring and mitigating tool, which includes: colour coding of pipes, operational, safe work and medical procedures, permits to work, emergency response plans, housekeeping rules, MSDS's and signage requirements (PPE, flammable etc.). • Security procedures and proper security measures must be in place to protect workers and clients. 	Proponent

Visual Impact	<ul style="list-style-type: none"> The aesthetic view of the site maybe reduced 	<ul style="list-style-type: none"> Ensure general cleanliness of the building, most importantly the sanitary facilities. Regular waste disposal, good housekeeping and routine maintenance on infrastructure will ensure that the longevity of structures is maximised and a low visual impact is maintained. 	Proponent
Cumulative Impact	<ul style="list-style-type: none"> Operating similar activities in the area will contribute to cumulative impacts 	<ul style="list-style-type: none"> 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 	Proponent

7. ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

The Environmental Management System (EMS) is an internationally recognized and certified management system the organization's environmental programs in a comprehensive, systematic, planned and documented manner. The proponent should develop and implement an EMS for the operations of the facility. An EMS ensures ongoing incorporation of environmental constraints. With the aim to improve the environmental performance with resulting increases in operational efficiency, financial savings and reduction in environmental, health and safety risks.

The key elements of an effective EMS are:

- The development of an Environmental Policy, which is a statement of a company's commitment to the environment and can be used as a framework for planning and action.
- An assessment of corporate activities, products, processes, and services that might affect the environment.
- Details of environmental regulations and legislation that apply to the business and how to comply with these.
- Method statements and procedures to control and document activities that could have a significant environmental impact.
- An environmental improvement programme, including policies and procedures to manage waste and resources.
- Defined environmental roles and responsibilities for staff.
- A formal and recorded staff training and environmental awareness programme;
- Systems for internal and external communications on environmental management issues.
- A record of environmental performance against set targets.
- Systems to identify and correct problems and prevent their recurrence.
- Emergency procedures to follow in the event of an environmental incident.
- Periodic audit to verify that the EMS is operating as intended; and
- Formal review by senior management with a view to adapting and improving the EMS as necessary.

8. COMPLIANCE MONITORING

To ensure continual improvement in environmental performance and reduce adversity of potential negative impacts, it is advisable to keep monitoring the identified environmental receptors. Monitoring of all activities during the construction period will be under the responsibility of the Contractor, whose environmental performance will be controlled by the ECO.

Table 5: Monitoring Schedule during site establishment phase

Element	Location	Type of monitoring	Frequency of monitoring	Purpose of monitoring
Dust	At the construction sites	Visual monitoring	Throughout phase	To ensure adherence to environmental protection requirements
Wastewater flows generated at the construction sites	At the construction sites	Visual monitoring	During monthly site visits	To ensure adherence to environmental protection requirements
Collection of solid waste	At the construction sites	Visual monitoring	During periodic site visits	To ensure adherence to environmental protection requirements
Protective measures at the construction site	At the construction sites with the right documentation	Visual monitoring	Daily	To ensure adherence to environmental protection and safety requirements
Noise & vibrations resulting from equipment work	Project area/close to settlements	Portative noise metering device	During periodic site visits, daily	To ensure adherence to environmental protection requirements
Traffic operation /movement	At the construction site	Visual monitoring of machinery and trucks carrying construction materials	During periodic site visits	To ensure adherence to environmental protection requirements

Table 6: Monitoring during operation phase

The issue to be monitored	Monitoring Objectives	What needs to be monitored	Frequency and means of Monitoring
Spills and leaks	Prevent environmental pollution	leakages, pipe bursts, etc.	Daily inspections and meter reading
Occupational health risks	Ensure health and safe working condition	Chemical exposure and presence of health hazards	Daily physical observations.
Waste management	Prevent environmental pollution and contamination.	Litter chemical storage & handling, cleanliness, Chemical composition of sludge.	Daily inspections and physical observation. -quarterly chemical testing
Implementation of the EMP	Ensure compliance to this EMP and adherence to the regulative measures during the operation, maintenance, and decommissioning phase	Implementation of specified measures and compliance to the EMP and other relevant legal requirements.	Biannual environmental report to MEFT.

9. EMERGENCY RESPONSE PLAN

Emergencies can occur at any time or place during the operation of the proposed facility. Some of the emergencies which are associated with the proposed project are as follows.

- Substance spillage i.e., oil, concrete, chemicals, etc.
- Fire outbreak
- Accidents

Table 7: Emergency response plan

NO.	Type of Emergency	Response actions	Responsible
1.	Substance spill i.e., concrete, oil, chemicals, etc.	<ul style="list-style-type: none"> • Stop and control the spill at the source first. • Contain the spill/leakage with appropriate containers i.e., drip trays, sumps, etc., and in an approved manner to the satisfaction of the Municipality. • Clean the affected area with water or an approved cleaning product. • The contaminated soil should be removed and disposed of at the Walvis Bay landfill site. • Repair vehicle or machinery with leakage. • If it cannot be repaired, such vehicle or machinery should not be used until it is safe to do so. • Report the incident to the Municipality and record it in the logbook. • Refer to the individual products Material Safety Data Sheet (MSDS), hereto attached 	<ul style="list-style-type: none"> • Proponent
2.	Fire outbreak	<ul style="list-style-type: none"> • Follow the holistic Fire Approach as presented in Annexure 3 	<ul style="list-style-type: none"> • Site Guard/Manager
3.	Accident i.e., injury to a person	<ul style="list-style-type: none"> • The priority after a construction accident should be to get medical attention for an injured person. • Assess the injured person's situation by checking breath, pulse. • Notify the First Aid Person • Assist the First Aid Personnel • Record in the incident report form. 	<ul style="list-style-type: none"> • Proponent

10. CONCLUSION

The proponent should play a pivotal role in the implementation of this EMP and should ensure proper coordination with other stakeholder and provide training to all employees, contractors, and sub-contractors. The proponent should also ensure to avail necessary resources (i.e., human, financial etc.) and synergies to enable the implementation of this EMP.

Upon approval by the authorities, this EMP shall be considered legally binding and any deviation or transgression is punishable by law as per the Environmental Management Act, No. 07 of 2007. The preparation of this EMP is based on the current information provided, any changes or deviation from the initial plan of this project shall trigger changes to this EMP.

Lastly, this EMP is valid until the project has been successfully implemented. A copy of this EMP shall be kept onsite. The competent authority is mandated to conduct regular monitoring and inspections on this project and to provide regular (annually) reports on this project or as required by the authority.

11. ANNEXURES

Annexure 1: Environmental Compliance Monitoring Checklist

Annexure 2: Fire Response Plan

Annexure 3: MSDS Copper Concentrate

Annexure 4; MSD Lithium Petalite

Annexure A: Environmental Compliance Monitoring Checklist

PART 1: ADMINISTRATIVE INFORMATION

Project Title:		Date:
Project location:	Reporting period	Individual Preparing Checklist:
Region:		Department:
Scheme Superintended:		Phone No.:

PART 2: ENVIRONMENTAL ASPECTS

ENVIRONMENTAL ASPECT/IMPACT	ENVIRONMENTAL COMPLIANCE (AS PER EMP REQUIREMENT?)		Remarks (specify the location, a good practice observed, causes of non-conformity, and proposed action)
	YES	NO	

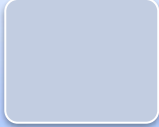
PART 3: RECOMMENDATION

FOR EACH ITEM CHECKED IN PART 2, DESCRIBE THE CORRESPONDING CONTROLS TO BE IMPLEMENTED TO REDUCE POTENTIAL ENVIRONMENTAL IMPACTS (e.g., spill prevention, erosion controls, air emission controls including dust suppression, selection of materials, etc.). Provide details of the activities and impacts for each box and the proposed mitigations. Include attachments where appropriate. Use the same number system for your input.

ECO: Signature: _____ Date: _____

Line Manager _____ Date: _____

Annexure B: Fire response Plan



STEP 1

- Do not panic
- Press the nearest alarm button
- Rescue any person in immediate danger, if safe to do so



STEP 2

- If possible, commence fighting the fire
- Call fire brigade



STEP 3

- Leave the building by the nearest emergency exit
- Ensure all other personnel are warned along the way
- Do not stop to collect personal belongings
- Do not use lifts, use stair ways



STEP 4

- Report to the assembly point
- Do not return to the building until authorized to do so