ENVIRONMENTAL MANAGEMENT PLAN FOR THE EXISTING & OPERATIONAL ERONGORED ELECTRICAL SUBSTATION ON PORTION "A" OF ERF 3289, MONDESA SWAKOPMUND & SUBSQUENT REZONING OF PORTION "A" FROM "GENERAL BUSINESS" TO "PARASTATAL"



Assessed by: NYEPEZ CONSULTANCY CC



Proponent: NAMBAZA INVESTMENT CC

P.O. Box 7227 Swakopmund Namibia

April 2024

TABLE OF CONTENTS

| DEFINITIONS | 3 |
|--|----|
| 1. INTRODUCTION | 4 |
| 1.1 AIMS | 6 |
| 1.2 Erf 3289 Site land use details | 6 |
| 1.3 ELECTRICAL SUBSTATION OPERATION COMPONENTS | 8 |
| 1.4 Substation Capacity | 8 |
| 1.5 LOCALITY | 9 |
| 2.EMP ADMINISTRATION | 13 |
| 2.1 Roles and Responsibilities | 13 |
| 2.1.1 Project Manager | 13 |
| 2.1.2 Nambaza Investment cc & ErongoRed SHEW | 13 |
| 2.1.3 Contractor | 13 |
| 3. RECORDING AND REPORTING | 14 |
| 4. Environmental Management and Training | 14 |
| 5. Construction & Operation Phase EMP | 15 |
| 6.NON-COMPLIANCE PROCEDURES DURING CONSTRUCTION | 26 |
| 7.SUB-CONTRACTOR MANAGEMENT | 26 |
| 8.ENVIRONMENTAL MONITORING AND AUDITING | 26 |
| 9.DOCUMENTATION, RECORD KEEPING AND REPORTING PROCEDURES | 27 |

LIST OF TERMS, ACRONYMS AND ABBREVIATIONS

DEA Department of Environmental Affairs

EA Environmental Assessment

EAP Environmental Assessment Practitioner

EIA Environmental Impact Assessment

EMA Environmental Management Act no 7 of 2007

EMP Environmental Management Plan

MET Ministry of Environment and Tourism

SHEW Safety, Health, Environment and Wellness

PCO Pest Control Officer

ECO Environmental Control Officer

MSDS Material Safety Data Sheet

DEFINITIONS

Construction: Means the building, erection or modification of a facility, structure

or infrastructure that is necessary for undertaking of an activity including the modification, alteration, upgrading or

decommissioning of such facility, structure or infrastructure.

Contractor: Means a person (other than a ErongoRed employee) or a company

contracted/ legally appointed by ErongoRed to perform work for

ErongoRed on a ErongoRed site/premises.

Developed: Refers to development that is already established and existing. Referring

to the existing Electrical substations, already constructed and in operation

Existing: Existing is used to describe something which is now present, available, or

in operation, especially when you are contrasting it with something which

is planned for the future

Operational: Piece of equipment that is operational is in use or is ready for use.

1. INTRODUCTION

The proponent (Nambaza Investment cc) is the registered owner of Erf 3289, Mondesa Swakopmund. ErongoRed as a key development stakeholder are the custodian of most electrical substation constructed and operating in Erongo Region, particularly the existing and operational electrical substation established on portion A of Erf 3289, Mondesa, Swakopmund.

The electrical substation project site is 27.3m² in size. The substation is an existing and operational substation. Nambaza Investment cc are the owners and developers of the AK Plaza Service Station established and developed on Remainder of Erf 3289. Erf 3289 was subsequently subdivided into two (2) Portions, Portion A and remainder of Erf 3289. Portion "A" of erf 3289 was and is earmarked for development and establishment of an electrical substation which is intended to serve and provide electrical power to the large shopping complex development being developed on Remainder of Erf 3289, this business development includes shops and service station developed on the remainder of erf 3289. These two portions or portion of erven are interlinked but serving difference intertwined purposes.

In January 2024, Swakopmund Municipality recommended and approved the subdivision of erf 3289 into Portion A and Remainder of erf 3289. The erf is located in Mondesa Extension 7 and zoned General Business. Council of Swakopmund Municipality however approved the new zoning of Portion A of Erf 3289 to change from General Business to Parastatal so that portion A where the substation exist can be transferred from Council to ErongoRed as the custodian of the electrical substations in the entire Erongo Region and Swakopmund in particular.

Several activities that were undertaken during the construction of the substation are listed activities thus Nambaza Investment cc would like to apply for an Environmental Clearance Certificate through the application and submission of a detailed EMP to ensure compliance and for the continuous operation of the substation being environmentally compliance and responsive.

It is important to note that construction activities would result in impact on the receiving environment due to the fact that the present-day social and environmental processes will be impacted or disturbed and thus it will take some time before the environment can either return to a state similar to the pre-construction state or find a new equilibrium.

The significance of the possible impacts of this development on the environment have been identified such that ways to counteract the impacts most likely to occur or most likely to cause

significant impact on the environment can be determined. For the purpose of this project, impacts were evaluated based on the severity of the potential impact and likelihood of "event" the occurring.



Ref No:

MUNICIPALITY OF SWAKOPMUND

M 3289

NAMIBIA

www.swkmun.com.na

Enquiries: JT Heita

29th January 2024

пип.соп.пи

NAMPLAN Town Planning Consultants
P O Box 467
SWAKOPMUND
13001
Namibia

ൻ winton@namplan.africa

(064) 4104125 Fax2email: 0686519137

53 Swakopmund

Dear Sir.

SUBDIVISION OF ERF 3289, MONDESA, EXTENSION 7 INTO PORTION A AND REMAINDER AND SUBSEQUENT REZONING OF PORTION A FROM GENERAL BUSINESS WITH A BULK OF 1.0 TO PARASTATAL (C/M 2023/12/12 - M 3289)

The Municipal Council of Swakopmund at its meeting held on 12th December 2023 resolved as follows:

- (a) That the subdivision of Erf 3289, Mondesa, Extension 7 into Portion A and Remainder be approved.
- (b) That the rezoning of Portion A from "General Business" with a bulk of 1.0 to "Parastata" be approved.
- (c) That an Environmental Clearance Certificate for the transmission and supply of electricity be obtained before submission of the rezoning application to the Urban and Regional Planning Board is made.
- (d) That the subdivision of Erf 3289, Mondesa Extension 7 is subject to a compensation fee of 7.5% in respect of endowment fee in terms of the Urban and Regional Planning Act, 2018 (Act No.5 of 2018) in conjunction with the Municipality of Swakopmund Property Policy.
- (e) That the applicant provides proof that the rezoning has been approved by the Minister and promulgated before submission of any business registration and/or building plans to the Engineering and Planning Services Department for approval.
- (f) That the title deed conditions registered against Erf 3289, Mondesa Extension 7 be retained for the Remainder of Erf 3289, Mondesa Extension 7, as follows:
 - (i) The erf shall only be used or occupied for purposes which are in accordance with and the use or occupation of the erf shall at all times be subject to the provisions of the Swakopmund zoning Scheme prepared and approved in terms of the Urban and Regional Planning Act, 2018 (Act 5 of 2018);

Should you have any queries, please do not healtate to contact the Manager. Town Planning, Mr. J. Helta, at telephone number (064) 410 4403 or email at ihelta@swkmun.com.na.

Yours faithfully,

C McClune

GENERAL MANAGER: ENGINEERING & PLANNING SERVICES

JB/Jh

Swakopmund Municipality

2024 -01- 29

General Manager Engineering & Planning Services

1.1 Aims

The aim of the EMP is to provide detail of the management actions required to implement the mitigation measures identified in the desktop and Scoping study thereby ensuring that the operations of the electrical substation on portion "A "of Erf 328, Mondesa is carried out in a manner that takes cognizance of sustainable development and is in line with National legislation. These actions are required to minimize negative impacts and enhance positive impacts associated with the operations.

It is important to note that the EMP is a working document and may be updated and amended as new developments or upgrades emerge (e.g. environmental data), policies, authority guidelines and technologies develop.

This EMP is concise and practical to ensure easy implementation and compliance by all parties and actions involved in this project. Positive and negative impacts as well as impacts which may affect both the social and natural environment have been considered in order to provide a complete picture of the impact that the project may have on the receiving environment.

The following aspects were evaluated, and their impacts identified as follows:

- Social aspects
 - Introduction of Nambaza Investment cc employees
 - o Alteration to surrounding environment
 - Maintenance activities on site
 - Traffic flow during construction & operations
- Environmental aspects
 - Habitat destruction
 - Waste creation
 - Change in topography
 - Erosion
 - Noise
 - Alteration to surface water flow

1.2 Erf 3289 Site land use details

The construction development and existence of the facility is by law required to comply with the Namibian Environmental Management Act. Given the sensitivity of the land use of the existing and operational of the electrical substation on portion A of Erf 3289, it is therefore vital that the socio-economic & environmental impacts associated with the substation facility, is thus required for the Environmental Clearance Certificate to be obtained from the Ministry of Environment, Tourism and Forestry to ensure environmental audit, compliance, minimize and preventing of the adverse negative impacts of the existing operational facility.

The electrical substation on portion A of Erf 3289 Mondesa Swakopmund Urban area, on Grootfontein street with GPS Position: *Lat -22.649688*, *Lon 14.555019*. Erf 3289 is 4361.6m² but was subdivided into 2 potions (Portion A & Remainder). This It is therefore a requirement through the Namibia Environmental Act, Act no. 5 of 2007, that due to environmental concerns associated with this existing substation facility, that an ECC be acquired for the secured continuous operational activities of this facility.



The ErongoRed substation facility development project is currently existing as it was already constructed. The business electrical facility is to serve and provide electrical power to the business complex established on Remainder of 3289 which is zoned Business. Further, the electrical substation also serves to provide power to adjacent residential properties within close radius to Erf 3289 & Remainder.

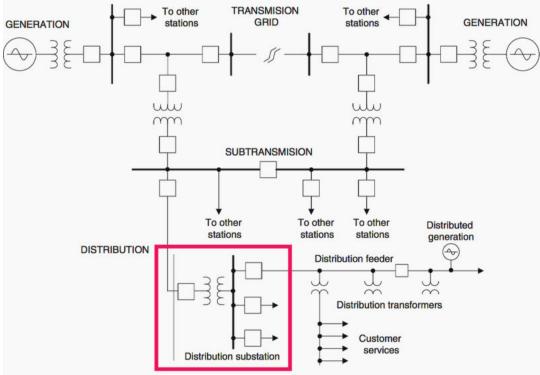
The construction of this existing electrical substations, like construction of any other industrial facility, consisted of several stages: survey, design, civil works, electrical work, testing and commissioning. Substations contain the specialist equipment that allows the voltage of electricity to be transformed (or 'switched'). The voltage is stepped up or down through pieces of equipment called transformers, which sit within a substation's site

1.3 Electrical substation operation components

The major components of a typical substation are:

- Air Circuit Breaker.
- Batteries.
- Bus Support Insulators.
- Capacitor Bank.
- Circuit Switchers.
- Concrete Foundation.
- Conduits.
- Control House





1.4 Substation Capacity

The current exiting and operational electrical mini-substation constructed on "portion A" of erf 3289 Mondesa, Swakopmund "to be **rezoned** from "**General Business**" to "**Parastatal**" has a load capacity of up to 400Kilowate voltage. This is translated as 300 Amps which is a 3-phase substation.

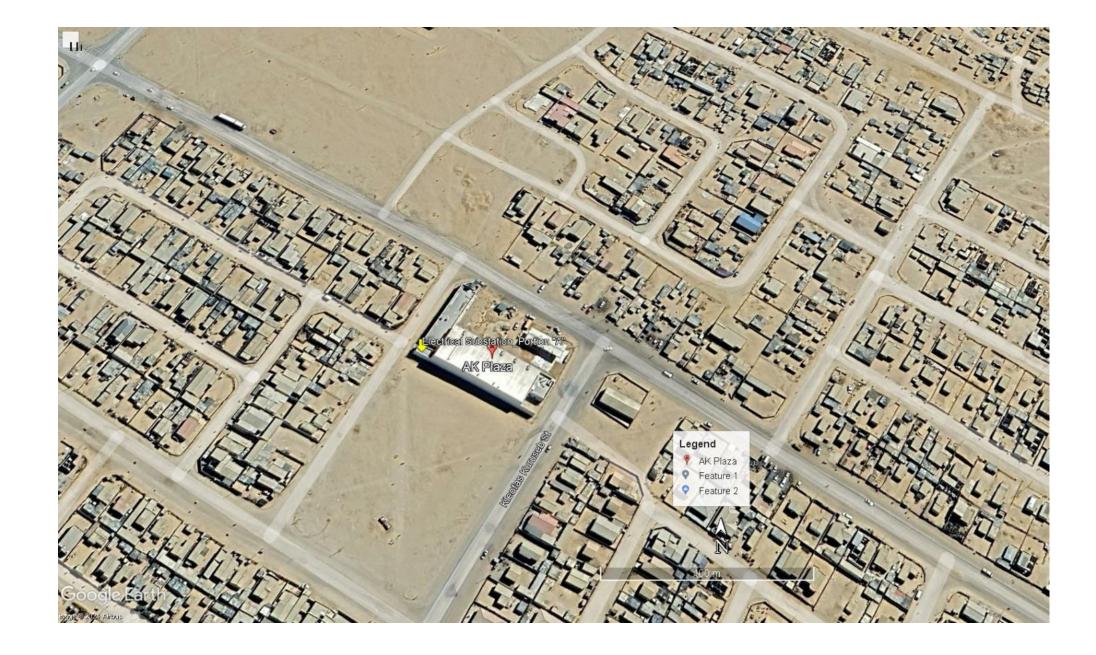
According to the electrical standards in Namibia, The Namibian Electrical Safety Code, as referenced in the Electricity Act of 2007, requires all structures to be at least two (2) meters away from an 11kV line. This creates a tunnel within a two (2) meter radius around a bare overhead power line through which things are not allowed to overhang.

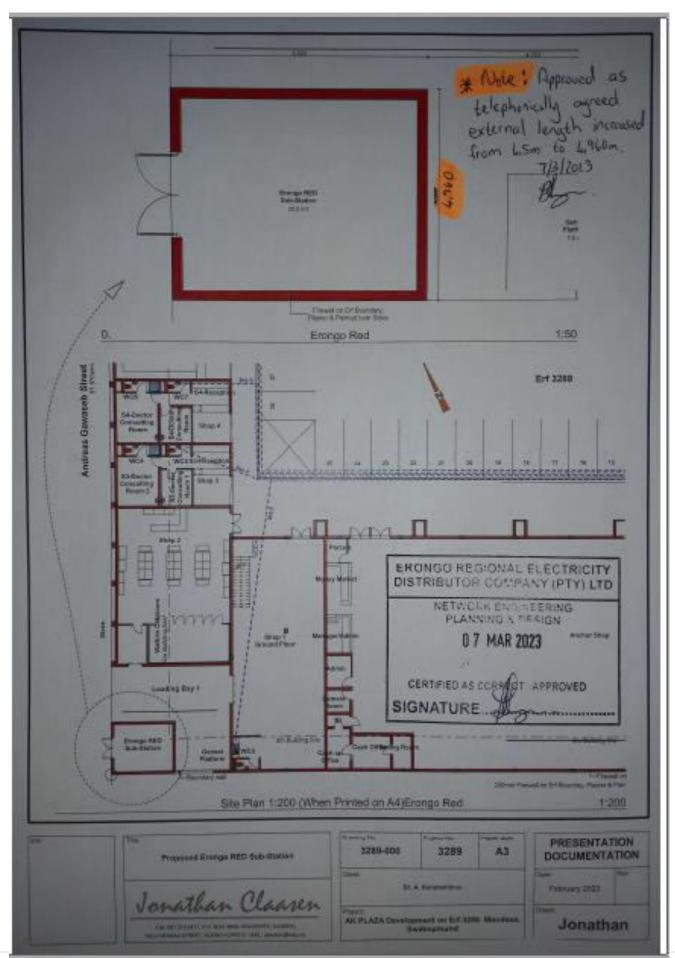
Nambaza Investment cc therefore, appointed by Nyepez Consultant cc to apply for the Environmental Clearance Certificate for compliance. The Environmental Impact Assessment (EIA) was conducted under the requisites of the Environmental Management Act (EMA) (Act 7 of 2007) and its Regulations (2012).

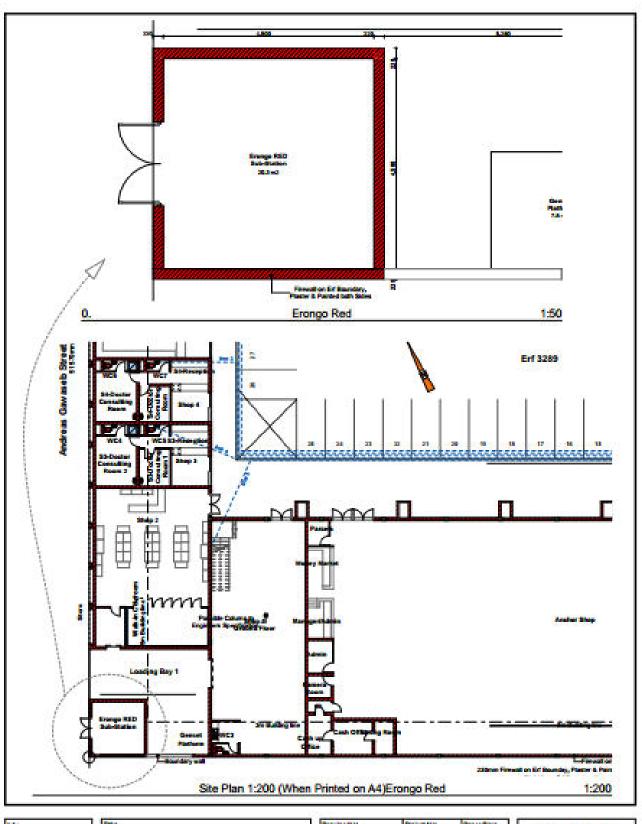
1.5 Locality

The project area is located on portion A of Erf 3289 Mondesa Swakopmund at the corner of Fransisca van Neel and Kleaophas Karuseb street, with GPS Position: *Lat -22.649688, Lon 14.555019*. Erf 3289 is 4361.6m² but was subdivided into 2 potions (Portion A & Remainder). Portion A of Erf 3289 shall be rezoned from General Business to "Parastatal "to ensure the swift transfer of the substation from Nambaza Investment cc to ErongoRed as custodian of the electrical substation. The Remainder of Erf 3289 shall return its original zoning of General Business as the erf is developed with commercial business facilities to be supported by the same substation.











2. EMP Administration

The Contractor will receive copies of the Environmental Management Plan (EMP) and all personnel shall be required to familiarize themselves with the contents of this document.

2.1 Roles and Responsibilities

It is the responsibility of Nambaza Investment cc and ErongoRed to ensure that all management actions are carried out. The successful implementation of the EMP is, however dependent on clearly defined roles and responsibilities by several stakeholders, each fulfilling a different but vital role to ensure sound environmental management during each phase of the project. The following roles and responsibilities have been identified as it pertains to this project:

2.1.1 Project Manager

- Is responsible for the enforcement of the EMP
- Must make sure that Safety Health and Environment (SHE) requirements are included in the tender documents sent to the contractor
- Must ensure that a Safety Health Environment and Wellness (SHEW) clause is included in the contract document and communicated to the Contractor before the inception of the project.
- Must ensure that the contractor remains in compliance with the requirements of this EMP, through regular communication and monitoring.

2.1.2 Nambaza Investment cc & ErongoRed SHEW

- To ensure that all requirements with regards to this EMP are fulfilled.
- Assist the Project Manager in ensuring the contractor remains in compliance with this EMP.
- Provides SHEW inductions for the Contractors and their employees
- Organize and implement monitoring and audit functions, in consultation with the Project Manager
- Report back to the Project manager on contractor compliance to the EMP before the project close-off and final payment is made to the contractor

2.1.3 Contractor

- Is responsible for the implementation of the EMP
- Ensuring all tasks undertaken under the scope of work, are in accordance both with Nambaza Investment cc's SHEW policies and procedures as well as to the

- requirements of this EMP.
- Putting in writing a system of communication, in which all incidents and accidents are reported to the SHEW section
- Ensuring that all employees receive a SHEW induction before the start of the project.
- Ensuring that the work being done does not create a nuisance to any being working, residing or living on adjacent properties or within the immediate surroundings of the site.

Nambaza Investment cc has the right to ban any employee from the site, which have not attended a SHEW induction, until the time that they receive induction. Nambaza Investment cc also has the right to stop all construction activities if it is found that a gross violation of the EMP is taking place.

3. Recording and Reporting

The Environmentalist assigned by Nambaza Investment cc to the project, shall submit an environmental compliance report at regular intervals, to the Project Manager. These reports shall include a description of all activities on site, problems identified, non- conformances, commendable project progress noted and remedial action implemented in the event of non-conformances. Records relating to compliance monitoring shall be kept on site and will be made available for inspection by relevant competent authority.

4. Environmental Management and Training

Before any work is commenced on the site, the Contractor shall ensure that adequate environmental awareness training of site personnel takes place and that all employees receive an induction presentation on the importance and implications of this EMP. The Contractor shall liaise with the Project Manager prior to the commencement date to fix a date and venue for the induction and to agree on the content.

The Contractor shall provide a suitable venue and ensure that the specified employees attend the course. Contractor shall ensure that all attendees sign an attendance register. As a minimum, training should include:

Explanation of the importance of complying with the EMP,

- Discussion of the potential environmental impacts of construction activities,
- The benefits of improved personal performance,
- Employees' roles and responsibilities, including emergency preparedness,
- Explanation of the mitigation measures that must be implemented when carrying out their activities.
- Explanation of the specifics of this EMP and sensitive areas,
- Explanation of the management structure of individuals responsible for matters pertaining to the EMP.

The contractor shall keep records of all environmental training sessions, including names, dates and the information presented.

5. Construction & Operation Phase EMP

The section below summarizes the possible impacts which Nambaza Investment cc's construction activities are likely to have on the environment and details mitigation measures to ensure that these construction phase activities are managed sustainably. Each objective is also tied to a responsible person. The following project specific mitigation measures shall be applicable to the proposed project:









| ASPECT | Management | Management & Mitigation Measures | Responsible | |
|-----------------------------|---|--|---|--|
| objective | | | person | |
| | | | | |
| Environmental Awareness | Minimize the occurrence of environmental impact on the work and surrounding area. | All staff to receive environmental awareness training All new staff coming onto site shall receive environmental awareness training. Refresher environmental awareness training to be available when required. The contractor shall erect and maintain information posters at key locations on site. All staff are to be made aware of their individual roles and responsibilities in achieving compliance with the environmental authorization and EMP. Regular project meetings shall be scheduled between the Contractor, Subcontractor and Nambaza Investment project team. Continuous awareness training shall be conducted by the Contractor on specific issues during toolbox talks; either as a selected environmental topic of interest, or a discussion on non- compliance, incident or even that has occurred. Whenever necessary, advice/suggestions from SHEW can be requested. | Project manager, contractor, Environmentalist (Nambaza Investment cc) | |
| Health, Safety and Security | Reasonable measures are taken to ensure the safety of the public at all times during | Identify fire hazards, demarcate and restrict public access to the site. The owners of erf 3289 will be notified 14 days prior to construction about the project and the Contractor team leader will be introduced to the landowners or their representatives | Project Manager and Contactor | |
| construction. | Maintain an incident and complaints register. Personnel should be properly educated about the impact of HIV/ AIDS. Any person making himself guilty of violence, harassment or any other activity deemed inappropriate by the community, must immediately be removed from | | | |

| | | the site. | |
|--|---|---|-----------|
| Interaction with landowners /Community | Construction related activity inside No- Go areas is prevented in an effort to avoid environmental impacts to such areas. | Areas outside the project area must be treated as no-grareas. No traps are to be set for animals on the farm. Erect, demarcate and maintain temporary fence around perimeter of any no go area. Unauthorized access and construction related activity inside No- Go areas is prohibited. Before work commences, Nambaza Investment shall inform all affected landowners and authorities about the project, at least 14 days before the start of the project. | Contactor |
| | | Nambaza Investment shall secure all rights of way to cross over private properties. The contractors may not stray from the Nambaza Investment work area. The contractor shall inform the owner or his legal representative before entering onto any private property, of his intention to do so and shall make such arrangements with such owner or his legal representative as may be necessary to ensure free and unhampered entry to, and movement on or over the property concerned, for the duration of the project. This should be done at least one month in advance and written proof of such communication should be available at all times. The success of the project depends on good relations with the landowners. Thus, | |

| | the landowners must have knowledge of | |
|---|---|--|
| | any changes to the construction that might | |
| | occur, but only if they are affected by it. | |
| • | A system of communication must be | |
| | devised by the contractor and made | |
| | available to Nambaza Investment, in order | |
| | to inform Nambaza Investment about all | |
| | incidents and accidents (including those | |
| | affecting the environment) and injuries | |
| | sustained. | |
| • | Appropriate contact numbers shall be | |
| | made available to the landowner, to ensure | |
| | open channels of communication and | |
| | prompt responses to any queries and | |
| | claims. | |
| • | The rights and privacy of the landowner | |
| | shall be respected at all times and all staff | |
| | shall be sensitized to the fact that they are | |
| | working on private property | |
| • | The contractor shall not interfere, under any | |
| | circumstances, with build infrastructure | |
| | belonging to the landowners. No | |
| | construction worker is allowed to access | |
| | any of the neighboring properties without | |
| | the direct consent of the property owner | |
| • | Construction activities shall be limited to | |
| | daylight hours only and no noisy activities | |
| | may be carried out during the night. | |
| • | A register shall be kept of all complaints | |

| Archaeological and Cultural sites | | from landowners. All claims shall be handled immediately to ensure timely rectification The Contractor is wholly accountable for his workforce transgressions Should a heritage site or archaeological site be uncovered or discovered during Contractor, Project Manager, Environmentalist |
|-----------------------------------|---|--|
| วแฮ | | construction activities, cease any work in immediate vicinity, clearly mark the area and take GPS readings. The contractor or staff immediately should notify |
| Waste management | To avoid, manage and mitigate potential impacts to the environment caused by waste water discharge and litter during construction | Appropriate pollution control facilities necessary to prevent discharge of water containing polluting matter or visible suspended materials into watercourses or water bodies shall be designed and implemented. Runoff from the cement/concrete batching areas shall be strictly controlled and contained water shall be collected, stored, either treated or disposed of-site at a location approved by the environmental officer. Illegal dumping is prohibited. Waste is to be disposed at the nearest municipal dumpsite. Separate waste containers must be provided for hazardous waste, potentially hazardous waste, general waste and construction waste. Hazardous / harmful waste must be clearly distinguishable as such. Containers shall be provided with lid or netting to prevent the waste from being removed by scavengers or wind. Waste containers should not be over-filled. No waste may be burned on site. All waste products must be moved to the nearest waste dump at a weekly |

| | | basis. | |
|-------------------------|--|---|------------|
| | | Impermeable temporary septic tanks are to be provided in sufficient quantity to manage waste water. | |
| | | Waste water to be disposed of according to waste management specification. Permits for disposal at external sewage sites and proof of disposal shall be obtained. | |
| Hazardous Substances | Minimise the risk of impact to the environment | All hazardous substance will be stored in suitable containers as defined in the method statement or Material safety data sheet (MSDS). | Contractor |
| | through safe | Containers will be clearly marked to indicate contents, quantities and safety requirements. | |
| | storage, handling use and disposal of hazardous substances | All storage areas will be bunded. The bund should be of sufficient capacity to contain a spill/leak from stored containers plus 10% of the volume of the content | |
| | | The contractor shall ensure that diesel and other liquid fuel, oil and hydraulic fluid is stored in appropriate storage tanks or in bowsers. | |
| | | The tanks /bowsers shall be situated on a smooth impermeable surface(concrete) bund. The impermeable lining shall extend to the crest of the bund and volume inside the bund shall be 130% of the total capacity of the storage tanks/bowser (110% statutory requirement plus an allowance for rainfall | |
| | | Adequate firefighting equipment shall be made available at all hazardous storage areas | |
| | | In an event of a spill, contaminated soil must be collected in containers and stored in a central location and disposed of at approved dumpsite | |
| | | No smoking shall be allowed within the vicinity of the hazardous storage area. Drip trays should always be kept on site in | |

| | | the event of leakage fleet of machinery. No smoking shall be allowed within the vicinity of the hazardous area Hazardous substances should be stored in a well-ventilated are behind lock and key Used oils, fuel, paints, grease and solvents should be stored in or other suitable containers, which must be labelled, seal removed from the site to an appropriate disposal site or rec facility. Areas shall be monitored for spills and any spills shall be con cleaned and rehabilitated immediately. Waste matter from or con chemicals, oils, paint solvents, etc. may be poured into drains onto the ground. Hazardous waste shall be disposed of at a registered waste deposit |
|------------------------|--|---|
| Batching plant | Control concrete and cement batching activities in order to prevent spillage and contamination of soil, surface water and ground water | Concrete mixing shall be carried out on an impermeable surface such as on boards or plastic sheeting or within a bunded area with an impermeable surface). Bagged cement must be stored in an appropriate facility and at least 10m away from water drains. Hardened concrete from washout facility or concrete mixer must be either reused or disposed of at an appropriate licensed disposal facility. Any access sand and stone and cement must be removed from site on completion of the construction phase. Ready mix concrete is encouraged |
| Vegetation clearing | To clear the project site prior to construction without causing unnecessary environmental damage. | Indigenous vegetation which does not interfere with safe construction of the substation shall be left undisturbed. Permits for removal must be obtained from the competent authority (Directorate of Forestry) prior to cutting or clearing affected species in case of protected plants. No bush clearing is allowed outside the 2-ha portion of land. The objective of bush clearing is to clear the minimum number of trees and bush necessary for the |

| | | construction of the substation. |
|---------------------|--|---|
| | | No burning of vegetation is allowed as an alternative to cutting of vegetation. |
| | | No herbicide application is allowed at the substation site |
| Water resources | | Do not mix concrete directly on the ground. Contractor |
| | | Use plastic liners and mixing tray at all times. Remove waste concrete and sediment sludge to an appropriately designated storage area in order to prevent contamination during rainfall. |
| | | Water must be used sparingly and the Contractor must record and report water use monthly |
| Protection of | Ensure care is | No interference with livestock or wildlife shall occur Contractor |
| Fauna | taken to minimize disturbance to fauna during construction | Poaching is prohibited. |
| Veld fire | | Firefighting equipment must be kept in close proximity Contractor |
| prevention | | to the where work is taking place, at all times during construction. |
| | | Smokers must be cautious at all times no lit cigarettes should be thrown away. |
| | | Fires are to be limited to the campsite only, as this will reduce the fire hazard. Any cases of veld fires caused during the construction period must be reported immediately |
| Emergency | Enable a rapid and | Emergency numbers to be kept in fleet. Contractor |
| procedure | effective response | |
| | to all types of | |
| | environmental, | |
| | Safety and health | |
| | emergencies. | |
| Increase in traffic | Minimise potential | The existing tracks and proclaimed road will be used. Contractor |
| and Safety and | risk of injury and/or | Basic road safety behavior for all contractors, |
| Emergency | death to third | especially drivers, through training and awareness will be undertaken. Typical issues include: |
| situations | parties. | Keeping to 20km/hr speed limit. Ensuring that all drivers have valid licenses. |

| | | Making sure that all vehicles are roadworthy. Zero tolerance for drinking and driving. Using lights appropriately for visibility. regulations. Road accidents are considered emergencies and will be handled in accordance with the Nambaza Investment's Emergency Response Procedure(s) and National road safety | |
|--------------------------------------|---|--|---------------------------------|
| Noise from transportation activities | Manage increase in disturbing noise levels (nuisance) Nuisance and health impacts | All noise generating activities will be kept to a minimum. No traffic, unless in emergencies or if continuous pouring of concrete will be allowed, between sunset and sunrise. Concrete pouring activities should be planned such that they occur during the morning hours to avoid late night driving. Traffic activities will be limited to the daylight hours between sunrise and sunset to avoid undue noise disturbance. Compliance with relevant standards, specifications and legislation concerning noise will be adhered to | Contractor |
| Dust and other air emissions | Manage increase in dust levels (nuisance & health impacts) | Excavation, handling and transport of erodible materials shall be avoided under high wind conditions or when a visible dust plume is present. Dust generation from all activities will be minimised wherever possible. A maximum speed limit of 20 km/hr will be enforced to control dust emissions, and minimize incidents onsite. Transport of construction material will ensure measures to prevent fugitive dust emissions. Dust suppression measures shall be implemented if necessary. Dust may be controlled by damping of the road with water when necessary to minimise nuisance dust. Construction machinery and equipment will be maintained in good working order in order to minimise exhaust fumes. | Contractor |
| Site Rehabilitation | Minimize visual and ecological pollution | Rehabilitate all features, infrastructure associated with the construction phase that is not in use. | Contractor, Project Manager and |

| | All areas disturbed by construction activities shall be subjected to rehabilitation. | Environmentalist |
|---|--|------------------|
| • | All spoil and waste will be removed to a registered waste site and certificate of disposal provided. | |
| • | All equipment used as part of construction to be removed from site. | |

6. NON-COMPLIANCE PROCEDURES DURING CONSTRUCTION

The contractor shall comply with the environmental specifications and requirements and any failure on their part will entitle the Project Manager to impose corrective actions required. In the event of non-compliance, the following recommended process shall be followed:

- Non-compliances will be identified during inspections or audits carried out by the Environmentalist or Nambaza Investment's SHEW section and reported to the Project Manager for corrective action.
- The Project Manager shall issue a notice of non-compliance to the Contractor, stating the nature and magnitude of the contravention and shall be discussed at project site meetings.
- The Contractor shall act to correct the non-conformance within 14 days of notification.
- The Project Manager shall at all times have the right to stop work and/or certain activities on site in the case of non-compliance or failure to implement remedial measures.
- If a trend of non-conformances or of unresponsiveness to nonconformances is identified, it is up to the discretion of the Project Manager to follow the appropriate Nambaza Investment procedure to limit a contractor's ability to carry out future work for the company for a given period of time

7. SUB-CONTRACTOR MANAGEMENT

The contractor shall in writing inform its sub-contractors and issue them a copy of this EMP and SHE Plan. Sub-contractors shall indicate in writing their commitment to comply with these plans. The Contractor has the overall responsibility of ensuring that all its sub-contractors comply with both plans.

8. ENVIRONMENTAL MONITORING AND AUDITING

Environmental monitoring must be conducted at least once every month during construction. Benefits derived from the monitoring and final audit process might include:

- identification of environmental risk;
- development or improvement of the environmental management system;
- avoidance of financial and time loss;
- avoidance of legal sanctions;
- increase in staff awareness:

identify potential cost savings;

Commonly, the environmental monitoring or audit of a site will cover all management procedures, operational activities & systems, and environmental issues and will be carried out by the Nambaza Investment's SHEW section.

9. DOCUMENTATION, RECORD KEEPING AND REPORTING PROCEDURES

It is vital that an appropriate document handling and retrieval system be developed for all EMP documentation. This will ensure that there is adequate EMP documentation control and will facilitate easy document access and evaluation. EMP documentation must include:

- EMP implementation activity specifications;
- Induction records;
- site inspection reports; and
- monitoring reports;

Responsibilities must be assigned by the Nambaza Investment's responsible persons/contractor to relevant personnel for ensuring that the EMP documentation system is maintained and that document control is ensured through access by and distribution to, identified personnel.

Document control is important for the effective functioning of an EMP. A document handling system must be established to ensure adequate control of updating and availability of all documents required for the effective functioning of the EMP. This procedure applies to the EMP as well as procedures and policies relating to the EMP, which must be controlled (i.e. identified, registered and changes recorded).

.....

Nyepez Consultancy cc

Environmental and Management Consultant