



## **TRAFFIC AND COMMUNITY SAFETY MANAGEMENT PLAN FOR NKULA B AND KAPICHIRA I REHABILITATION WORKS**



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## **EXECUTIVE SUMMARY**

The *Traffic and Community Safety Management Plan (TCSMP)* has been developed by Electricity Generation Company (Malawi) Limited (EGENCO) to guide the safe and efficient movement of vehicles and equipment during the rehabilitation of Nkula B and Kapichira I hydropower stations. These works are funded by the African Development Bank (AfDB) as part of a broader effort to modernize Malawi's electricity infrastructure.

The primary aim of the plan is to ensure the safety and wellbeing of project personnel, local communities and the environment throughout the project's implementation. This includes addressing risks arising from heavy and abnormal load movements, congestion traffic and site operations.

### **Key Objectives:**

- i. Ensure compliance with Malawi's Road Traffic Laws and international safety standards.
- ii. Minimize traffic-related risks to workers, local residents and road users.
- iii. Establish designated transportation routes and implement Road Transport Protocols (RTP).
- iv. Provide guidance for emergency response, health and safety risk management and environmental compliance.
- v. Promote awareness and community engagement on road safety practices.

### **Scope:**

The TCSMP covers traffic safety within the project zones at Nkula and Kapichira power stations and along access routes, including public and local roads (e.g. Chikwawa-Kapichira and Nkula-Zalewa-Mwanza). The plan applies to all project staff, contractors and subcontractors.

### **Project Context:**

Nkula and Kapichira stations are among Malawi's key hydropower assets. Their rehabilitation involves the overhaul and modernisation of turbines, generators, control systems and auxiliary components. The goal is to improve efficiency, extend asset life and stabilize the national power supply.

### **Safety Measures:**

- i. Speed limits: 30km/h in project areas; reduced to 20km/h in schools and trading centres
- ii. Drivers must undergo defensive driving training, medical checks, and hold valid licences.

- iii. Daily vehicle inspections, PPE compliance, and use of reverse alarms are mandatory.
- iv. Transport of passengers in open trucks is prohibited.
- v. Banksmen/flaggers are required at all vehicle movement points.
- vi. Emergency response mechanisms are in place for accidents, fires and spills.

### **Community and Environmental Considerations**

- i. Regular sensitization campaigns to educate communities on traffic risks.
- ii. Prohibition of pollution (e.g. oil leaks, dust) and illegal activities within protected areas like Majete Wildlife Reserve.
- iii. Strict adherence to African Parks rules for Kapichira works.

### **Implementation and Monitoring:**

Roles and responsibilities are clearly assigned to project managers, OHS personnel, contractors and drivers. A checklist system and periodic audits are in place to ensure compliance. The plan will be reviewed annually or after any major incident.

In conclusion, the TCSMP outlines a comprehensive framework to safeguard people and assets during the rehabilitation works. Its successful implementation will enhance traffic safety, reduce incidents and ensure that project activities are carried out responsibly within the community and environmental context.

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## ACRONYMS

AfDB	African Development Bank
AfDB-ISS	African Development Bank-Integrated Safeguards System
AP	African Parks
COC	Code of Conduct
COF	Certificate of Fitness
DDC	Defensive Driving Course
DRTSS	Directorate of Road Traffic Safety Services
EGENCO	Electricity Generation Company (MW) Limited
ERP	Emergency Response Plan
ESCOM	Electricity Supply Corporation of Malawi
GIIP	Good International Industry Practice
HSE	Health, Safety and Environment
HSEG	Health and Safety Executive Guidelines
IRP	Integrated Resource Plan
KPI	Key Performance Indicator
MIV	Main Inlet Valve
MW	Mega Watts
OEM	Original Equipment Manufacturer
OHS	Occupational Health and Safety
PPE	Personal Protective Clothing and Equipment
RSI	Road Safety Inspection
RTP	Road Transportation Protocols
SAPP	Southern African Power Pool
SEP	Stakeholder Engagement Plan
TCSMP	Traffic Safety Management Plan
WHSQ	Workplace Health and Safety Queensland

## DEFINITIONS

Risk	Risk is the likelihood that an unwanted event will occur.
Risk Assessment	Means a Programme to determine any risk associated with any hazard at a project site in order to identify the steps needed to be taken to remove, reduce, or control such hazard.
Hazard	A hazard is anything with the potential to cause physical harm or ill health.
Fall protection plan	Means a documented plan of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk
Medical surveillance	Means a planned Programme or periodic examination (which may include clinical examinations, biological monitoring, or medical tests) of employees by an occupational health practitioner or, in prescribed cases, by an occupational medicine practitioner
Health and safety requirements	It means comprehensive health and safety requirements for a project, site, and scope of work. This specification is intended to ensure the health and safety of people, both workers and the public, and the duty of care to the environment.
Health and safety plan	Means a document plan that addresses hazards identified and includes safe work procedures to mitigate, reduce, or control hazards identified
Heavy Equipment/Vehicle/Plant	Refers to heavy-duty vehicles designed for executing project tasks like earthwork operations, heavy lifting and involving project work activities. They are also known as, project equipment, plant, earth movers, vehicles, or mobile equipment.
Site	Means work site, worker's camp, material storage area, fabrication areas etc.
Operations	Any activity associated with project.
Operators	Drives and operators of project equipment /crane used in project projects
Banksman	Personnel will be in place at all accesses to guide project traffic and record arrivals and departure of vehicles against the deliveries schedule, if required.
Defensive Driving	It is a form of training for vehicle drivers that goes beyond mastery of the rules of the road and the basic mechanics of driving. The aim is to improve competency to control the risk of driving by anticipating dangerous situations, despite adverse conditions or the mistakes of others.
Fatigue	A condition characterized by a lessened capacity for work and reduced efficiency of accomplishment, usually accompanied by a feeling of weariness and tiredness. Example: difficulty in focusing eyes, yawning, is drifting out of the lane, dropping head etc.
Logbook	A record book detailing information of all trips to be undertaken including the driver's name, journey date, starting and ending odometer readings, and purpose of the journey including materials details.
Extended Work Hours	The daytime work that involves more continuous hours or requires work during the evening should be considered extended or unusual. Extended work may be used to maximize scarce resources.





## **1. INTRODUCTION**

### **1.1. Background of the Project**

Electricity Generation Company (Malawi) Limited (EGENCO) is a wholly government-owned enterprise with the mandate to generate electricity for the nation. It was incorporated on 9th September 2016 as a public company under the Companies Act (Cap 46:03) and commenced operations on 1st January 2017. In compliance with Malawi's market rules, EGENCO sells all electricity it generates to Electricity Supply Corporation of Malawi Limited (ESCOM), the designated single buyer, through its transmission infrastructure.

Currently, EGENCO's total installed capacity connected to the national grid is 441.55 MW, comprising 390.15 MW from hydropower sources and 51.40 MW from diesel generators. The diesel generators are primarily operated as peaking and emergency plants.

According to the Integrated Resource Plan (IRP, 2022), the peak electricity demand in Malawi is projected to be 508MW in 2025, while the installed generation capacity is still at 441.55 MW. This deficit highlights the urgent need for both capacity expansion and system reliability improvements.

Following more than two decades of commercial operation at Nkula B and Kapichira Phase I Power Stations, the generating units have aged significantly. As a result, their availability and efficiency can no longer be guaranteed. Frequent equipment downtimes caused by mechanical failures in turbines, generators, and unit control systems are increasingly common. Moreover, obsolescence of spare parts due to technological advancements has hindered effective maintenance, contributing to plant inefficiencies and reduced reliability.

In response to these challenges, EGENCO, through the Ministry of Finance and Economic Affairs, has secured funding from the African Development Bank (AfDB) to implement a rehabilitation and modernization project. This project will target turbines, generators, and control systems at Kapichira Falls and Nkula Falls Hydropower Stations. The modernization is expected to extend the useful life of the equipment and significantly improve operational efficiency, system reliability, safety, data management, and overall availability of the power plants.

The successful completion of the project is expected to increase the quality and quantity of power supplied to the national grid. This will also support regional power trade through the interconnected Southern African Power Pool (SAPP) network. Furthermore, the project will enable diesel plants to revert to their original function as peaking plants, thereby reducing operational costs. It is anticipated that the project will also create employment opportunities for Malawians during the implementation phase and potentially beyond.

The total project implementation period is estimated at 21 months, 6 months for Kapichira and 15 months for Nkula, excluding the time required for manufacturing and delivery of parts, which may take between 10 to 12 months. The project cost is approximately EUR 12 million for Nkula and EUR 4.5 million for Kapichira.

## **1.2. Project Description**

The primary objective of the project is to enhance the performance, efficiency, availability, and longevity of the Nkula and Kapichira power stations. This will be achieved through the refurbishment of turbines, generators, and associated components, and the modernization of outdated control, excitation, and protection systems with modern state-of-the-art technologies.

The project scope includes complete plant overhauls, supply and installation of new components, and recommissioning of the generating units. Consultancy services for the project were provided by the Original Equipment Manufacturer (OEM), Voith Hydro, who is also expected to execute the rehabilitation and modernization works.

The project will be executed under a single contract covering both power stations, with implementation phased: Kapichira will be rehabilitated first, followed by Nkula B.

These improvements are expected to significantly enhance the reliability and quality of electricity supplied to the national grid via the Single Buyer. The proposed rehabilitation and modernization scope includes:

- i. Refurbishment of turbines and associated components
- ii. Refurbishment of Main Inlet Valves (MIVs) and bypass valves
- iii. Installation of backup hydro-cyclone filters
- iv. Refurbishment of generators and associated components
- v. Replacement of digital and hydraulic governors
- vi. Replacement and repositioning of the MIV hydraulic system (Nkula)

- vii. Replacement of generator and transformer protection systems
- viii. Refurbishment or replacement of obsolete electrical auxiliaries
- ix. Refurbishment or replacement of obsolete mechanical auxiliaries
- x. Replacement of unit control, common control, and automation systems with modern technologies
- xi. Testing and recommissioning of the units

### **1.3. Project Location**

The rehabilitation and modernization project will be implemented at two major hydropower stations in the Southern Malawi: Nkula Falls Hydropower Station in Neno District and Kapichira Falls Hydropower Station in Chikwawa District. These two facilities are part of EGENCO's cascade of hydropower stations along the Shire River and together contribute significantly to Malawi's total electricity generation capacity. Understanding the geographic and operational context of these sites is essential for appreciating the scope and importance of the planned upgrades.

#### **1.3.1. Nkula Falls Hydropower Station**

Nkula Falls Hydropower Station is located in Neno District, approximately 80 km from the commercial city of Blantyre, in the Southern Region of Malawi. It is the first of EGENCO's cascaded power stations along the Shire River. The station comprises two plants: Nkula A, with three machines each rated at 11.7 MW, producing a total of 35.1 MW, and Nkula B, with five machines each rated at 20 MW, producing a total of 100 MW. The total installed capacity for Nkula Falls is therefore 135.1 MW. The

Nkula B units were commissioned between 1980 and 1992.

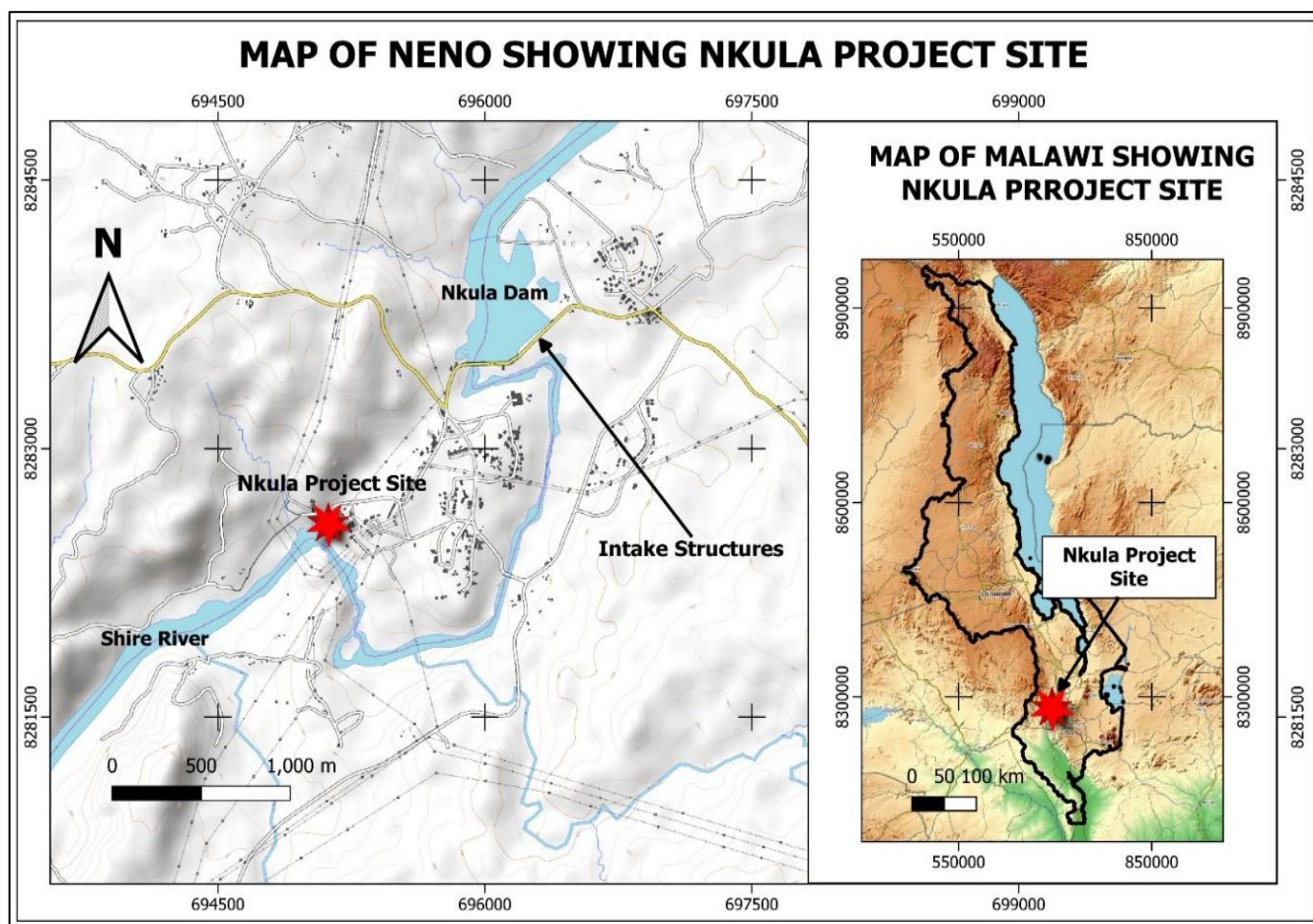


Figure 1.1: Map showing the location of Nkula B project site

### 1.3.2. Kapichira Falls Hydropower Station

Kapichira Falls Hydropower Station is located in Chikwawa District, in the Lower Shire area, about 70 km from Blantyre. It is the last in the cascade of hydropower stations along the Shire River. The station consists of two phases: Kapichira Phase I, commissioned in 2000, comprises two machines each rated at 32.4 MW, totaling 64.8 MW; and Kapichira Phase II, commissioned in 2013, which includes two additional machines also rated at 32.4 MW each. The total installed capacity for Kapichira Falls Hydropower Station is 129.6 MW.



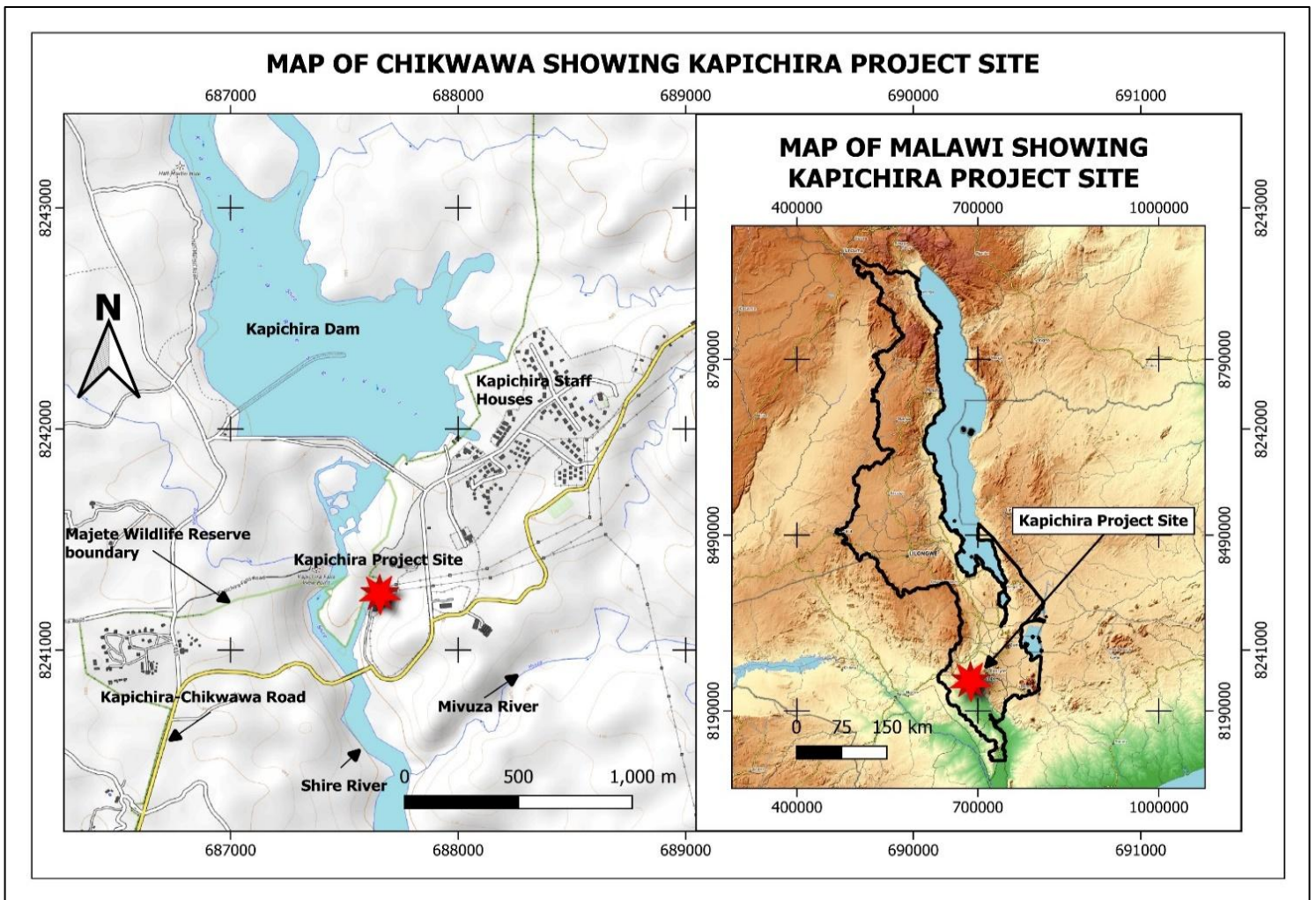


Figure 1.2: Map showing the location of Kapichira Phase I project site

#### 1.4. Objectives Traffic and Community Safety Management Plan

The objective of this Traffic and Community Safety Management Plan (TCSMP) is to safeguard the health and safety of employees, stakeholders and the communities at risk from hazards associated with the rehabilitation project plant or traffic movements.

The activities associated with the project will create an environment where the road users are faced with a series of unusual hazards in the form of heavy equipment, mobile lifting equipment, transportation of heavy abnormal loads (generator parts) along public and power stations roads. These

activities may put the public and surrounding communities within the stations at a risk. The project traffic may also cause air pollution, noise and other hazards indicated in Table.1.

Therefore, this plan will aim at

- i. To ensure that transport is carried out in accordance with the Road traffic Laws of Malawi and other applicable regulations, codes of practice and guidelines.
- ii. To reduce the potential of traffic associated incidents in transportation of goods by establishing a Road Transport Protocol (RTP) that defines the designated and approved transport routes during the rehabilitation works.
- iii. To avoid or minimize potential risks and impacts of construction activities on road safety
- iv. To avoid or minimize potential risks and impacts on the community and other road users with respect to traffic and transport
- v. To identify actions to minimize and mitigate impacts on road safety, traffic flow and access

### **1.5.Principles of Traffic and Community Safety Management Plan**

The safety practices shall, therefore, be orientated towards reducing conditions which lead to such hazards and consequent stress which increase the risk of accidents. In order to achieve this, approaches used in this Traffic Management Plan shall include the following fundamental principles:

- i. Identification, evaluation and monitoring of the potential traffic and road safety risks to workers, affected communities, stakeholders and road users within the stations and if applicable outside the stations throughout the project life cycle and, where appropriate, will develop measures and plans to address them.
- ii. Road safety assessment and monitoring of incidents and accidents, and preparation of regular reports of such monitoring.
- iii. Make traffic safety a vital and high priority component of project.
- iv. Promote control of plant equipment by operators or drivers in a clear and positive way.
- v. Conduct routine inspection of traffic control elements and traffic operations,

### **1.6.Scope and Purpose of the Plan**

The scope of the plan covers the safe and efficient management of vehicles and all mobile equipment associated with the rehabilitation projects. The management of traffic according to this plan shall intended to avoid and minimise traffic risks and impacts on the health and safety of the local community, personnel engaged with the Project, and any persons that may be affected by traffic related activities of the Project.

For the sake of Kapichira works, the plan also incorporates African Parks rules and regulations which shall be adhered to at all times.

The requirements of this Plan shall apply to all project personnel including contractor(s) and subcontractor. The heavy vehicular traffic resulting from the project requires both management on project site and also traffic impacts along local road networks within the two stations and main roads connecting these stations (e.g. Kapichira-Chikwawa T416 earth road and Nkula - Zalewa- Mwanza M6 road).

The plan shall be reviewed annually or after a major incident during construction and operation phase of the project. This will ensure its effectiveness and takes into account changes at the workplace.

## **2. GUIDELINES, LEGISLATIVE & LEGAL BACKGROUND**

The following local guidelines and legislations as well as international guidelines and Good International Industry Practices (GIIPs) were used during the development of this Plan as minimum requirements

- i. EGENCO's Occupational Safety, Health and Welfare Policy.
- ii. African Parks Rules and Regulation.
- iii. Road Traffic Act of Malawi, No.69 of 1998
- iv. Malawi's Occupational Safety, Health and Welfare Act, 1997.
- v. HSG 150 third edition (2006); Health and Safety in Project Guide
- vi. HSG 136 - A guide to Workplace Transport Safety
- vii. WHSQ Traffic Management Guidance
- viii. AfDB's Integrated Safeguards System (ISS)

## **3. TRAFFIC CONTROL AND MANAGEMENT/TRAFFIC MANAGEMENT MEASURES**

### **3.1. Traffic Safety Management and Arrangements**

All personnel engaged with the project activities are expected to actively participate in creation of safe work environment, obey and follow all applicable laws, regulations, procedures and requirements regarding activities being undertaken in the workplace/ project sites.

All mobile plant/vehicles shall adhere to all site rules and regulations this includes site traffic rules and traffic management plan. Plant operators and drivers will need to adhere to these basic requirements:

- i. Every driver or mobile equipment operator must exercise due care and diligence by assessing and avoiding risks when driving. As soon as any unsafe or unhealthy situation comes to any

employee's attention, it must be reported as soon as possible to his/her employer or health and safety officer.

- ii. Every or mobile equipment operator must undergo medical examinations. The onus is on the driver to disclose to the employer/supervisor the use of any medication or other substance or any medical condition due to illness (temporary or permanent) or any situation of emotional stress, that could negatively affect his/her driving ability.
- iii. The driver must ensure that no employees are transported in the back of open vehicles.
- iv. The driver must ensure that all canopies must be properly fitted and secured and that all loose tools and objects in vehicles are properly secured.

EGENCO shall impose a speed limit for all traffic on public roads and shall raise awareness among drivers to abide by the speed limits and designated routes. The maximum speed on site gravel roads shall be 40 km/h. Trucks shall be loaded in such a way as to avoid losing materials during transportation.

### **3.2. Health and Safety Arrangements**

#### **3.2.1. Drivers and operators**

- i. Drivers and operators are expected to obey all safety requirements as stipulate in Malawi's Road Traffic Act, OSH Act 1997, safety policies, safety rules book and this Plan as a minimum requirement.
- ii. Driver must take reasonable care for the health and safety of himself and others who may be affected by his acts or omissions.
- iii. Driver must not interfere or misuse intentionally or recklessly any item of equipment/vehicle which are provided for the interest of safety.
- iv. Before starting the engine to leave for journey drivers and operators shall check under the vehicle for people who may be resting.
- v. All drivers and operators shall wear the proper out of cab PPEs when disembarking from the vehicle or equipment while they are in the Site
- vi. When reversing, assistance must be sought from a banksman to give clear and distinct signals
- vii. Vehicles must always be operated in accordance with all national and local traffic regulations in addition to other guidelines imposed by the project.
- viii. Automatic reverse alarms must be installed on all vehicle & heavy mobile equipment



- ix. It is prohibited to carry passenger at the back of open vehicle or pickups, an appropriate passenger vehicle shall be provided like double cabs or minibus for ferrying of workers to and from the project site if need be.
- x. Drivers and operators working on night shift shall be allowed to have rest break within the night shift.
- xi. Persons working on night shifts shall not work for more than three consecutive nights
- xii. Drivers and operators should check their vehicles or equipment and sign the pre-operation checklist prior to start and Immediately notify for supervision of any difficulties or problems encountered during the daily inspection and end shift.
- xiii. Drivers should never give a lift to unauthorized persons or let unauthorised person operate project vehicles.
- xiv. The load shall be checked constantly and properly secured in safe manner.
- xv. All permanent drivers/operators who for some other reasons may want to travel outside the project areas using project vehicles shall be issued gate pass.
- xvi. Use of mobile phones while operating the equipment or driving a vehicle is not allowed.
- xvii. All drivers and Operators must be at least 18 years old and 21 years old respectively and hold a valid driving license for the type of vehicle/equipment they are in control of.
- xviii. Prior to deployment of driver / operator at the Project, ensure they have undergone Defensive Driving Course (DDC) and medical check-up. Only medically & physically fit person in respect of eyesight and blood pressure shall be deployed at site
- xix. Any plant operator or driver found working under the influence of alcohol or drugs shall be permanently dismissed from the project.
- xx. All vehicles mobile plant and equipment shall have a valid Certificate of Fitness

### **3.2.2. Main duties of drivers**

These shall include but not be limited to:

- i. Reporting any vehicle defects immediately to the Supervisors, Engineers and Health and Safety Engineer/Officer. This applies also to any accident or damage, regardless of extent of damage.
- ii. Vehicles shall be regularly inspected for defects by the driver and this shall be recorded in daily inspection sheet.
- iii. Drivers and operators shall use all safety provisions provided i.e. seatbelts, roll over protection systems, audio / visual warning systems etc.

- iv. Where vehicles need to pass open edges or tip into excavations etc., suitable secure stop blocks will be provided.
- v. Dumping Trucks should not be left with the tipping body raised and suitable props should be used whenever men need to work under the raised body
- vi. Vehicle keys shall not be left unattended at any time and vehicles must be made secure when not in use. Vehicles shall never be left unattended with the engine running.
- vii. Every driver and operator must exercise due care and diligence by assessing and avoiding risks when driving. As soon as any unsafe or unhealthy situation comes to any driver and operator's attention, it must be reported as soon as possible to his/her Supervisor, Engineers or Health and Safety Engineer/Officer.
- viii. It is the responsibility of the driver to ensure that he/she and passengers wear seat belts whilst the vehicle is in motion; comply with all safety, direction, and speed (traffic) signs; ensure that vehicle loads are properly secured onto the vehicles; and ensure that vehicles are not overloaded.

### **3.2.3. Vehicle, equipment and mobile plant Operator behavior**

If anyone or contractor on site observes any person, whether they are operating mobile plant or not, seem to be unfit to fulfill their task, or the task they are attempting is not safe, that person must report to the manager/supervisor or OHS personnel on the site of the behavior he has observed in the other person on the site. This includes but is not limited to:

- i. Fatigue
- ii. Being under the influence of drugs/alcohol
- iii. Erratic behavior
- iv. overloading.

### **3.3. Common Hazards Associated with Mobile Equipment**

The following are some of common hazards associated with mobile equipment. However, a thorough risk assessment shall still be required for each equipment use, work environment etc. The hazards assessment and list shall not be limited to the ones listed in the table.1 below.

ACTIVITY / HAZARD		SOME PRECAUTIONARY MEASURES
1	<b>Falling loads when loading / offloading</b>	<ul style="list-style-type: none"> <li>Workers and mobile plant should not be in the same spot at the same time as reasonably practicable. Therefore, the loading/offloading process occurs in two distinct phases:</li> <li>The driver should not be permitted to do work on the truck (e.g. stow or hold curtains, chains, or straps) while the vehicle is being loaded or offloaded.</li> <li>The driver must be in the driver safety zone where the mobile plant operator can clearly see the driver. It is the mobile plant operator's responsibility to ensure the driver is kept clear of vehicles during loading or offloading. If the driver leaves the safety zone or ceases to be in direct line of sight of the mobile plant operator, all mobile plant movements shall immediately cease and ensure that the driver is in the safe location.</li> <li>When all loading or offloading activity has ceased, the mobile plant operator must remove their vehicle from the exclusion zone and advise the driver that it is safe for them to enter the zone.</li> <li>Mobile plant must not enter the exclusion zone when the driver is within the exclusion zone (e.g. securing their load, placing gates or curtains)</li> <li>When a driver is within the rear of the truck, or near the tailgate, the driver and mobile plant operator must have visible contact with each other.</li> </ul>
2	<b>Lack of visibility</b>	<ul style="list-style-type: none"> <li>All people within the work area shall be required to wear high visibility clothing or vests and always maintain the line of sight with the operators.</li> <li>If possible mobile plant should be fitted with rotating or flashing lights to increase their visibility.</li> </ul>
3	<b>Blind corners</b>	<ul style="list-style-type: none"> <li>Mobile plant operators are required to sound their horn while approaching all blind corners.</li> <li>Flagmen or banksmen/women may be required to be placed in these locations to help manage traffic.</li> </ul>
4	<b>Reversing vehicles/plant</b>	<ul style="list-style-type: none"> <li>All mobile equipment shall have a reverse buzzer.</li> <li>Everyone should be aware of reversing vehicles and keep clear.</li> <li>Reversing trucks and other vehicles should have a banksman allocated at all times to ensure the safety of workers and prevent damage to vehicles and infrastructure.</li> </ul>

ACTIVITY / HAZARD		SOME PRECAUTIONARY MEASURES
5	<b>Blind spots on mobile plant and vehicles</b>	<ul style="list-style-type: none"> <li>• Most types of mobile plant and vehicles have blind spots where the operator cannot see certain angles due to obstructions by the plant (mirrors, mast, frames etc ), or difficulty for the driver to twist in position to see in all reversing directions.</li> <li>• All pedestrians and other mobile plant operators should be made aware during the induction period, that mobile plant have blind spots.</li> <li>• Mobile plant operators should not create blind spots by storage of materials or items on their mobile plant</li> </ul>
6	<b>Excessive Speeding</b>	<ul style="list-style-type: none"> <li>• Over speeding will increase the chances of collision therefore all speed limits and speed control mechanism shall be observed within and outside the station.</li> <li>• all equipment on the site shall be numbered with identification stickers for ease of monitoring and reporting of violations.</li> </ul>
7	<b>Equipment Malfunction</b>	<ul style="list-style-type: none"> <li>• Risks are created when a vehicle or mobile plant malfunctions e.g. brake failure or hydraulic system failure allows a load to be dropped. These additional risks can be controlled through maintenance and inspection.</li> </ul>
8	<b>Untrained or inexperienced operators or Operator impairment</b>	<ul style="list-style-type: none"> <li>• Untrained or inexperienced operators have a higher risk of making errors Incidents can also occur when operating unfamiliar equipment. Operator impairment through drugs or alcohol is not acceptable.</li> <li>• Impairment through fatigue must be managed through the human resources process.</li> </ul>
9	<b>Inappropriate use of mobile equipment</b>	<ul style="list-style-type: none"> <li>• Various plants have a wide range of capabilities; they are not to be used for any unsanctioned purpose. Inappropriate use may exceed design capabilities and safety features e.g. lifting people in a front-end loader</li> </ul>
10	<b>Tip-over</b>	<ul style="list-style-type: none"> <li>• Slow down when approaching corners and blind spots.</li> <li>• Wear a seatbelt at all times.</li> <li>• Be mindful of your surroundings and ensure the driving surface is clear of debris.</li> <li>• Keep clear visibility.</li> <li>• Approach wet surfaces very carefully.</li> <li>• Deploy safety warnings, cones, signs, etc. as required.</li> </ul> <p>(common causes of main causes of tip-over are driving with raised loads ,cornering too fast ,driving across inclines and uneven</p>

ACTIVITY / HAZARD		SOME PRECAUTIONARY MEASURES
		ground, overloading, incorrect use of attachments, braking too quickly, driving with raised bucket / grab, driving across inclines and uneven ground, or sand or gravel piles, overloading colliding with another vehicle or stationary object)
11	<b>Mobile plant / vehicle collisions</b>	<ul style="list-style-type: none"> <li>• All pedestrians should keep clear of equipment while they are working. Loads can often fall or bounce several meters.</li> </ul>
12	<b>Not using Seatbelts</b>	<ul style="list-style-type: none"> <li>• It is a legislative requirement that all vehicle drivers or mobile plant operators wear a seat belt to prevent an operator being crushed in the event of a roll over. This applies at all times when moving mobile plant, even at slow speeds or for short distances.</li> <li>• When the equipment overturns, the safest place for the operator is in the cabin with a seatbelt on.</li> <li>• The operator is advised to hold on, stay with the truck and lean in the opposite direction of the overturn. Almost every time an operator jumps from their equipment while it is overturning, they are killed or injured.</li> </ul>

### 3.4. Maintenance

All vehicles and machinery used during the Project shall be regularly maintained and repaired where necessary. In this regard, all project and passenger vehicles used during the Project shall be inspected by an appropriately qualified mechanic every three months following the commencement of the Project. The Project Safety Engineer/Officers shall ensure that regular inspections of project and passenger vehicles are undertaken to ensure that they are in good working condition and are not overloaded.

#### 3.4.1. Pre-operation checklist for mobile plant and vehicles

Mobile plant operators and vehicle drivers shall be responsible for ensuring their equipment is working correctly and safely. The daily pre-operation inspection shall be documented and identify any potential problems such as damaged or worn items.

#### 3.4.2. Out of service tag-out

Where problems are detected, the plant shall be removed from service until repairs are undertaken. This includes the use of 'Out of Service' tags, if required, Lock out, tag out' tags, and removal of keys to prevent others from unintentional use of the plant.

### **3.4.3. Maintenance program for all mobile plant and vehicles**

- i. All types of plants and vehicles shall document maintenance, inspection, and servicing programs. These activities shall be undertaken by qualified personnel.
  - a. Contractors bringing mobile plant or vehicles onto our site must undertake similar maintenance programs as a condition of their contract.
- ii. Gravel roads shall be sprayed with water to limit the generation of dust (where economically viable and environmentally acceptable) and/or vinasse shall be used to eliminate dust on earth roads. If the utilisation of water to limit dust generation on gravel roads is not possible for these reasons, an appropriate dust suppressant must be identified and used for this purpose.
- iii. Any potential road hazard or vehicle defect which may render a vehicle or road unsafe for use shall be immediately reported to the Project Manager, Supervisors or Safety Engineer/Officers who shall ensure that the vehicle/road is not used until necessary repairs have been undertaken.
- iv. All plant will have drip trays and always stop blocks with them and will be used when they are in a stationary position.
- v. All vehicles and plant that carry any person or people will ensure that they have a seat that has a safety belt.
- vi. no person will be transported on the back of any plant or vehicle.
- vii. Plant that will be driving on public roads will need to have a valid license disc and needs to be always roadworthy.
- viii. All moving plant must have a flagman with them at all times while they are on site.
- ix. Mobile plants shall have a rotating amber light on them and will have reflective tape on them to make them more visible.
- x. Mobile Plants will drive with their head lights on while they are on the site.

### **3.4.4. Parking**

- i. All vehicles shall be parked in designated areas which shall be identified and reverse parked where possible

### **3.4.5. Refueling**

- i. Engines shall be switched off during refuelling.
- ii. No naked light, open fire, electric heater etc. is allowed near vehicle while refuelling.
- iii. The use of mobile phone is prohibited during refuelling.
- iv. Loading and unloading of highly flammable liquids (e.g. gasoline) should not take place during a thunderstorm.

- v. While loading fuel bowser unto the loading line, bowser must be connected to an earthing point to prevent build-up of static electricity.

#### **3.4.6. Unauthorized Riding/Operation on Machines**

- i. No person other than the driver may ride on dumpers, tractors or other power-driven vehicles except where seating is specially provided for the carriage of passengers.
- ii. Persons working on or near vehicles shall be safeguarded during loading and unloading operations.
- iii. Drivers of vehicles that are not provided with safety cabs, dumpers etc. shall not remain on the vehicle during machine loading operations

#### **3.4.7. Smoking, Naked Lights, Drug and Alcohol Policy**

- i. EGENCO and all contractors shall ensure all their employees adhere to the Drug and Alcohol Policy.
- ii. All drivers shall be required to submit a drug and alcohol test in the event of a road traffic accident regardless of fault.
- iii. When refuelling tanker drivers must not carry matches or lighters while on duty/performing their work.
- iv. Smoking inside the cabin of the vehicle/equipment is not allowed
- v. Daily and random alcohol tests shall be conducted on all workers.
- vi. Driving under the influence of intoxicating drugs shall be punishable by dismissal from the project.

#### **3.4.8. Speed Limit**

- i. The speed limit shall not exceed 30km/h for the project area and access roads, 20km/h for trading centres/schools and hot spots along Chikwawa-Kapichira and Nkula – Zalewa – Mwanza Road. However, drivers shall reduce their speed to suit the prevailing site road condition, impetuous of activities and weather conditions.
- ii. All speed limits applicable to public roads shall be strictly adhered to by all drivers operating vehicles as part of the Project.
- iii. The failure to adhere to the prescribed speed limits is an offence and disciplinary action shall be taken

### **3.5. Flaggers/Banksman**

The primary function of traffic control procedures is to move vehicles safely and through or around project site while protecting on-site workers and equipment.

- i. Flaggers or Banksman providing temporary traffic control should wear high visibility clothing with a background of fluorescent orange-red or yellow–green and retro reflective material of orange, yellow, white, silver, or yellow green.
- ii. Because Flaggers or Banksman are responsible for controlling vehicles and equipment movement safely, they should be provided in-house or external training to improve the following awareness for controlling the traffic movement efficiently to prevent incident/accident. They must have
  - Sense of responsibility for the safety of workers
  - Training in safe traffic control practices
  - Average intelligence
  - Good physical condition, including sight and hearing
  - Mental alertness and the ability to react in an emergency
  - Courteous but firm manner
  - Neat appearance

### **3.6. Zone Demarcations**

#### **3.6.1. Project zone**

This comprises of zones where actual project works are carried out. Highest regard shall be given to traffic safety as well as to provide a safe working environment to the workers on the site. The project zones shall be labelled with necessary signage and shall have traffic control personnel in strategic place.

#### **3.6.2. Advance warning zone**

Warning zone is an area to warn road users of the approaching hazards and to prepare them for the changes in driving conditions. This is where drivers are notified on the need to reduce speed of their vehicles. The information shall be passed on through a series of traffic signs which shall convey the message in a clear and simple way. All the signs / barricades shall be always maintained properly. Sufficient stock shall be maintained so as to replace the damaged or vandalized signs / barricades.

The advance warning zone shall provide information on:

- i. The presence and type of the hazard ahead e.g. “Men working Ahead” sign or Heavy mobile equipment ahead, accompanied by the distance to the hazard.
- ii. Any changes affecting traffic arrangements (such as a reduction in the size of lanes, speed limit) or narrow bridges.



iii. Extent and type of hazard of the hazard ahead and for general information.

### **3.7. Traffic Control Devices**

These are equipment and installations over and, on the road, which individually and collectively perform the following tasks: warn the road user, inform the road user, guide the road user, modify road user behaviour, protect the road user and the vehicle, and ensure safety of pedestrians.

The primary traffic control devices used in project sites are signs, barricades, cones, humps, and markings.

### **3.8. Signage**

It is the responsibility of the Project Managers in consultation with the Safety Engineer/Officers to ensure that signage is conspicuously placed at appropriate locations along all access roads, and public roads (in consultation with the relevant traffic authorities) to indicate the following:

- i. Road hazards such as blind corners or loose gravel.
- ii. Appropriate speed limits.
- iii. Turning traffic.
- iv. Site access.
- v. Routes to be used by project vehicles, where appropriate.
- vi. Caution to be observed by motorists or pedestrians.
- vii. No-go areas for vehicles; and any traffic control information which may be relevant in the circumstances.
- viii. Any signage erected in terms of this Plan must be secured against being blown over or out of position by the wind or by-passing traffic. In addition, they should be located so as to provide adequate warning of hazards.
- ix. Signs located on two-way roads should be visible to traffic traveling in both directions, and care should be taken to ensure that signs are not obscured by vegetation or dirt.
  - The signs shall be categorized as all other traffic signs, i.e. Regulatory Signs, Warning Signs and Direction or Guidance Signs and shall be located such that its message is seen and is clear. The signs shall be of retro reflective sheets of engineering grade and be able to withstand temperatures up to 45 degrees Celsius.

### 3.8.1. Regulatory Signs

Regulatory signs impose legal restriction on all traffic. Therefore, they should be used only after consulting the Directorate of Road Traffic and Safety Services (DRTSS). These include all signs that give notice of requirements, prohibitions or restrictions. They indicate either what road users must do or what they must not do



### 3.8.2. Warning Signs

These give warning of hazards ahead, they are generally triangular in shape and, with the exception of the Give Way warning sign.



### 3.8.3. Information and directional

Information, directional signs normally give road users information about a route or places and facilities of particular value or interest. Below are the examples of the informatory and directional signs



### 3.9. Pedestrian and Public Safety

The contractor on the site shall ensure that there is no danger to pedestrians from movement of vehicles, falling objects from project vehicles and dust.

By ensuring that

- i. All the loads transported by the project vehicles are properly secured
- ii. Dust generated by project machinery is suppressed and controlled
- iii. Conducting road safety awareness campaigns to the communities surrounding the project site.
- iv. Conducting of regular meetings with the operators of mobile trucks and equipment on the importance of community safety.

### 3.10. Precautionary measures during transportation of materials along the road

- i. Accident prone areas (schools, villages and trading centres) throughout the project road stretch will be identified and appropriate safety measures and signage shall be provided.
- ii. Project vehicles will be regularly inspected for back lights and back horns to avoid undue incidents.
- iii. The community shall be engaged to report any unsafe driving of operators' unacceptable behaviour along the Chikwawa- Kapichira road.
- iv. Project vehicles shall be numbered with stickers that will help the communities to identify and report any unsafe behaviours. Records and details of the vehicles corresponding to their stickers shall be kept in the equipment register.
- v. Road Safety Inspection: The inspection of roads with the objective of identifying aspects of the road, or the road environment, which contribute to safety risk and where safety can be improved by modifying the environment.

### 3.11. Employees

- i. All personnel transported to and from project site shall be safely ferried in appropriate passenger vehicles. **No employee shall be transported on the back of open trucks.**
- ii. All vehicles transporting employees shall be appropriately maintained and shall not carry more passengers than the number of persons for whom seating accommodation is provided.

- iii. Assembly points for passengers embarking passenger vehicles shall be located at safe distance from areas/routes of high vehicle traffic. Roads and areas used by project vehicles shall, as far as possible be avoided by all personnel.
- iv. Vehicle and pedestrian safety shall be emphasised.
- v. All employees and project personnel shall be trained and informed as to the dangers and risks posed by project and other traffic, such training shall also include appropriate precautionary measures required to be undertaken to facilitate safe and efficient traffic management
- vi. Drivers shall be adequately trained in the recognition and avoidance of road hazards, vehicle maintenance and safety requirements.

## 4. ROLES AND RESPONSIBILITIES

### 4.1. Responsibilities

1. Project Managers and Power Station Managers	<ul style="list-style-type: none"> <li>• Approval of this Plan and mobilization of resources required for implementation of the Plan</li> <li>• Ensuring the Plan is implemented during the lifetime of the Project.</li> <li>• Ensuring compliance with current applicable law and approval of method statements that are compliant</li> </ul>
2. Supervisors and Team leaders	<ul style="list-style-type: none"> <li>• Assisting in the implementation of this Plan by fulfilling project requirements</li> <li>• Ensuring implementation of the commitments in this Plan</li> <li>• Providing necessary resources for proper implementation of this Plan</li> <li>• Ensuring that the Plan's requirements are complied with by the employees on the ground.</li> <li>• Participating in incident investigation and reporting all safety related issues</li> </ul>

	<ul style="list-style-type: none"> <li>• Make arrangements to ensure the HSE personnel is kept fully informed of any new activities or change of activities that could affect the safety of traffic and pedestrians on site.</li> <li>• Ensure Subcontractors, Visitors and all stakeholders are made aware of the plan, arrangements for vehicle and equipment movements that they submit for approval, details of their working activities that could necessitate any modifications/diversions to vehicle routes.</li> <li>• Ensuring that relevant activities are in accordance with this Plan and related procedures.</li> <li>• Providing oversight and conducting routine inspection on site regarding traffic safety</li> </ul>
3. Medical personnel	<ul style="list-style-type: none"> <li>• Contributing to the implementation of health precautions related to environment, health and safety objectives</li> <li>• Conducting health training of the related personnel on the topics covered by this Plan</li> <li>• Performing routine health examinations</li> <li>• Investigating all relevant health incidents and reporting findings and recommendations to the Project Manager.</li> <li>• Cooperating with the HSE personnel, HSE officers and Project Manager to develop, monitor, and review the Plan, as necessary.</li> </ul>
4. OHS personnel (OHS Specialists and Officers for both contractor and client)	<ul style="list-style-type: none"> <li>• Ensuring that relevant activities are undertaken in accordance with this Plan and related procedures including Park Rules and Regulations for Working in Protected Areas compiled by African Parks (in case of Kapichira).</li> <li>• Updating risk assessment reports and conducts internal audits to determine whether the requirements of this Plan are implemented</li> <li>• Identifying safety training needs and ensuring trainings are organized and all employees including Contractors are trained</li> <li>• Ensuring all incidents investigations are undertaken, reported and related issues concluded</li> <li>• Organize Hazard Identification and Risk Assessment in coordination with Project management for all vehicle &amp; equipment movement including the materials management</li> </ul>

	<ul style="list-style-type: none"> <li>• Ensure development, effective implementation and reliability of Risk Assessments for all vehicle &amp; equipment movement and operation control.</li> <li>• undertake H&amp;S Audits and workplace inspections</li> <li>• investigate incidents and accidents</li> </ul>
5. Environmental Specialists	<ul style="list-style-type: none"> <li>• Initiate training of employees, workers and project stakeholders on subjects such as hazardous waste and other environmental emergency procedures.</li> <li>• Implementing environmental policies and practices</li> <li>• Devising the best tools and systems to monitor performance and to implement strategies</li> <li>• Assessing, analysing and collating environmental performance data and reporting information to internal staff, clients and regulatory bodies</li> <li>• Confirming that materials, ingredients and so on are ethically or environmentally sourced</li> <li>• keeping up to date with relevant changes in environmental legislation and initiatives for compliance</li> </ul>
6. Employees	<ul style="list-style-type: none"> <li>• Have a duty to follow all OHS precautions, procedures, rules, laws and regulations according to this plan.</li> <li>• Have a duty to cooperate in creation of safe work environments</li> </ul>
7. Safety Representatives	<ul style="list-style-type: none"> <li>• Having the same responsibilities as general employees for their core duties,</li> <li>• Receive information provided by employees and to convey it to the Project Supervisor/Manager/ HSE Engineer/ HSE officers</li> <li>• Conveying the decisions made by the Project Manager/Project Supervisor /HSE Engineer.</li> <li>• Informing the Occupational Physician or HSE Engineer about risks present on the work sites</li> <li>• Assisting to implement the measures of the H&amp;S Plan</li> <li>• Assisting to undertake risk assessments.</li> <li>• Assisting to approve permits to work.</li> <li>• Assisting to approve safe job analysis.</li> </ul>

	<ul style="list-style-type: none"> <li>• Assisting to provide training and induction on health &amp; safety issues.</li> <li>• Assisting to undertake H&amp;S Audits and workplace inspections.</li> <li>• Assisting to prepare and revise the emergency response plan</li> </ul>
8. Contractors and subcontractors	<ul style="list-style-type: none"> <li>• Complying with the requirements of the Traffic Safety Management Plan.</li> </ul>

#### **4.2. Involvement with Traffic Management Plan**

- i. For a Traffic Management Plan to be successful, everyone working on projects whether they are operating a vehicle, mobile plant or are a pedestrian should comply with the traffic management requirements at all times.
- ii. All incidents shall be reported to supervisors, including near misses or other hazards.
- iii. All reported incidents, near misses or issues identified will undergo incident investigation and risk control processes and be reported to EGENCO's Head of Quality Assurance and Safety, Project Manager, Contractor's Management and African Development Bank (dependent on severity of the accident).
- iv. Incidents will also be analyzed periodically as part of the review of the traffic management plan and organizational practices.
- v. Compliance with the Plan shall be mandatory for all workers, contractors and visitors on this site.
- vi. Behaviors of all engaged in the projects shall be monitored to ensure compliance with the plan, site procedures and rules.
- vii. Failure to comply will lead to disciplinary action according to terms of conditions and service

### **5. LICENCING AND TRAINING**

It shall be required that:

- i. All Project vehicles comply with relevant traffic and transport licencing requirements (such as permit to ferry abnormal loads or hazardous materials, including hazardous waste).
- ii. All drivers of vehicles used during the Project have the requisite licences to operate any vehicle (or machinery) operated by them on site or on any public roads.
- iii. All Project vehicles have valid roadworthy certificates and licences (COF, insurance etc.).

- iv. Contractor and Subcontractors ensure that any driver/operator employed is provided training prior to their assignment.
- v. All drivers / operators must attend an induction course before being allowed to operate or drive vehicle/equipment at site.
- vi. Contractor and Subcontractors shall keep records of all drivers training the copy shall be made available at site for client's verification

## 6. EMERGENCY RESPONSES AND REPORTING OF HAZARDS AND ACCIDENTS

- i. Chikwawa District Road Traffic Department and District Hospital shall be consulted in relation to the availability of emergency services to attend to road accidents associated with the Project. However, Kapichira Power Station medical personnel shall be prioritised to handle first aid on medical emergencies associated with the project.
- ii. In the event that any traffic hazard is identified on site by any person or Project personnel, such hazard shall be immediately reported to the Project Manager and/or Safety Engineer/Officer who shall take the appropriate measures to avoid an incident or accident being caused.
- iii. **Drivers of project passenger service vehicles shall be required to undertake basic first aid training** and all project passenger service vehicles, project supervisor's vehicles shall carry first aid supplies which should be adequate to cater for the number of passengers carried on the vehicle in question and also to supplement for the hired mobile equipment.
- iv. In the event that an accident occurs on-site or off-site, the driver/operator/passenger/co-worker, shall immediately report to Chikwawa Police Office, the Safety Officer, Site Supervisors, and the Project Manager.
- v. Appropriate emergency service agencies shall be engaged in the management of emergencies /unplanned incidents to promote road and work environment safety and the efficient restoration of normal traffic conditions.
- vi. In the event of a fire incident/accident in the project area, local firefighting services shall be engaged.
- vii. The types of emergencies / unplanned incidents that may occur include but are not limited to; motor vehicle crashes, bush fires, environmental spills, project type incidents, structural catastrophic failures, inclement weather conditions and flooding.

In the event of traffic incident and /or accident the safety officer and project supervisors will:



- i. Determine the details of the incident/accident and identify the likely impact on the site.
- ii. Inform the Project Manager, and appropriate emergency and support services.
- iii. Immediately and continually co-ordinate activities for the duration of the incident.
- iv. Make consultations with the Project Management team on immediate action to prevent any further harm/damage.
- v. Provide initial response to an ongoing incident/accident with the aim of making an incident scene safe and prevent further harm to persons or property.
- vi. Provide close support to emergency services, including traffic control in the vicinity of the incident.

## **7. HEALTH AND SAFETY RISK MANAGEMENT**

Effective risk identification and management shall form an integral part of traffic safety management ; therefore, all activities shall be reviewed to identify those hazards which may give rise to situations of injury, loss or damage. Hazard identification and risk assessments that are relevant to the site conditions shall be conducted using hierarchy of controls and EGENCO risk assessment form.

### **7.1. Risk Management Process:**

For every project task taking place, the contractor will ensure that an issue-based risk assessment is conducted to capture all hazards and their contributing risks that has not been identify and these risk assessments will be explained to all employees, and they will sign an attendance register to ensure that they understand the hazards and their contributing risks.

Supervisors will ensure that they conduct a hazard identification on a daily basis for all the tasks and activities that they have planned for that specific day these risk assessments will be conducted in their area of work and it will be explained to all employees, and they will sign an attendance register stipulating that they understand all the risks involved in the activities which they are participating in.

- i. Employees – To attend discussions / Toolbox talks meetings concerning risk assessments and to sign an attendance register, to comply to the risk assessments as stipulated and to report any deviation, near miss and incident concerning the risk assessment.
- ii. Review Plan: Risk assessments should be reviewed on certain and specific time frames so that all risk assessments are kept up to date and so that all employees are re-trained on the hazards and there contributing risks. These time frames will be calculated according to these aspects:
  - After every near miss.
  - After every incident that has occurred.

- After any changes in the conditions and scope.

## **8. TRAINING AND CAPACITY BUILDING**

Traffic safety training and awareness campaigns will be delivered regularly to community leaders, project staff, contractors, and workers. These trainings and awarenesses will cover traffic management plans, safe driving standards, work zone safety, communication, risk assessment, and emergency response and reporting of hazards and accidents among others.

## **9. STAKEHOLDER ENGAGEMENT**

All affected stakeholders including members of the community, local authority and affected landowners shall be consulted, sensitised and trained in road traffic safety and procedures, in consultation with National Road Safety Council of Malawi or Directorate of Road Traffic and Safety Services prior to commencement of activities.

The scope of such engagement shall include dissemination of information and awareness on safety precautions, procedures for reporting complaints and provision of appropriate signage to warn road users.

It is the responsibility of EGENCO and any other contractor working on the project to ensure the following:

- i. All equipment and/or materials transported to or from project sites shall be appropriately secured or contained.
- ii. No project vehicles shall be loaded more than its manufacturer-specified weight bearing capacity.
- iii. Drivers and operators shall have valid licences and certification with periodic refresher trainings being conducted in driving techniques of heavy machinery

## **10. AFRICAN PARK RULES AND REGULATIONS (FOR KAPICHIRA WORK)**

For Kapichira power station; all project workers and visitors shall be required to observe the following rules and regulations as a minimum requirement for visiting and working within or close to the park area

- i. All staff working inside the park have to undergo induction training and must adhere to the rules and regulations as follows:

- ii. There will be a full list of names of staff who will undertake the induction exercise. These names will be kept by Law-Enforcement, and these will be the only people authorized to enter the park.
- iii. All vehicles entering the Park need to be registered using their registration numbers and the inventory to be shared with Park Management hence no unregistered vehicle will be allowed to enter the Park.
- iv. All heavy-duty machinery will need prior clearance before entering the Park
- v. All staff will be required to sign an indemnity form, indemnifying AP Majete.
- vi. Work can only take place between 07H00 and 17H00 each day, any work done beyond these hours shall seek approval from the Park Manager/Operations Manager.
- vii. Working on public holidays and Sundays must be approved by the Park Manager.
- viii. All staff entering the property will do so at own risk and will be expected to comply with the environmental laws of Malawi.
- ix. Wild animals have the right of way hence any animal seen crossing the road must be left to do so.
- x. Speed limit is strictly 30km/hr. and must be adhered to at all times.
- xi. Drivers must always check their vehicles for oil or fuel leakages and fix immediately.
- xii. No person shall enter a protected area with or in a motor vehicle unless there is a valid permit in respect of that motor vehicle.
- xiii. A permit to enter a protected area shall not be issued to a person who has been prohibited from entering a protected area under regulation 16 of the Wildlife Act.

**Anyone entering the Park is not allowed to do the following:**

- i. Enter or leave a protected area other than at a place designated as an entrance or exit.
- ii. Be within a protected area unless he is within 25 meters of a motor vehicle or boat or is in an observation place.
- iii. Knowingly alight from a vehicle in a protected area within 200 meters of any live animal (other than an insect or bird) unless he is in an observation place.
- iv. Exceeding a speed of **30km/hr** in a motor vehicle within Majete Wildlife Reserve.
- v. Throw cigarettes butts on the ground but take them with you to throw in a refuse bin.
- vi. Hooting the vehicle within Majete Wildlife Reserve.
- vii. Place any name, letter, figure, symbol, mark or picture on any plant or rock.
- viii. Remove from Majete any animal or vegetation whether alive or dead other than animal or vegetation lawfully introduced into the reserve by the person removing it;
- ix. You are not allowed to be in the wildlife reserve, between 6.00 p.m. and 6.00 a.m.; or

- x. Enter Majete Wildlife Reserve before 6.00 a.m.
- xi. Do not molest, provoke, feed or disturb any animal in any way by the project activities or project staff.
- xii. Discard litter or fecal material anywhere other than into a designated refuse bin or a prefabricated mobile toilet.
- xiii. Approach or follow any animal, or make any sudden movement or noise, play music or flashes a light or intentionally do something to cause an animal to move away from where it is, to change its direction of travel, to increase its pace or speed, to become frightened or to stampede shall be deemed to have disturbed the animal.

## **11.CONDUCTS THAT WILL LEAD TO IMMEDIATE ARREST**

The following conducts will likely lead to immediate arrest:

- i. collection or disturbance of any Fauna and flora will be allowed. This includes wood.
- ii. Hunting, injuring or killing of any other living creature found on site.
- iii. Setting snares and any other animal traps in the property
- iv. Fishing in the dam or river
- v. Cutting or removing any vegetation in a protected area, or damage or remove any object or geological, prehistoric, archaeological, historical or scientific interest in the reserve;
- vi. Leaving any fire which has been lighted, unextinguished; or
- vii. Discarding any burning object.
- viii. Throwing oil, diesel, petrol, concrete or rubbish in the river. Collect any money from members of the public, sell any goods, or offer any goods for sale or carry on any trade within a Majete Wildlife Reserve.
- ix. Placing, erecting, marking, spoiling, damaging disfiguring, altering, bending, covering, moving or removing any signboard, notice board or any notice within Majete WR or on any boundary of the reserve.
- x. Making use of or wearing any badge, uniform or emblem authorized to be worn by an officer of African Parks Majete.

The following shall be taken note of

- i. It shall be a condition of any person's entry into a park that he shall comply with any lawful order or direction, whether oral or written, given or issued by the Park Manager or any other officer.

- ii. If any person contravenes any direction or order lawfully given to him under the provisions of the preceding paragraphs, the Park Manager may orally or in writing forthwith cancel such a person's entry permit.
- iii. If in the opinion of the Park Manager, the presence of any person within Majete Wildlife Reserve is or would be detrimental to the proper management and control of the reserve, the Park Manager may order such a person to leave the reserve immediately and may, in addition, prohibit him from entering Majete Wildlife Reserve for a period not exceeding three years.

## 12. ANNEXES

### ANNEX 1: Road Traffic Safety Plan Implementation:

No	Reference Documents/Forms	Action Required	Monitoring Indicators	Implementation period	Responsibility
1	Road Traffic Safety Awareness campaigns to communities	Sensitize the communities affected by the project	Number of sensitization campaigns conducted	Quarterly	OHS Specialist, Contractor OHS team, Gender and Social Specialist, and Communications Specialist
2	Road Traffic Safety Rules for workers.	Conduct road safety induction sessions to all project workers	Minutes of induction session	Once	Contractor's Supervisors and OHS team
3	Plant, machinery and vehicle inspection checklist.	Inspect plant, machinery and vehicles	Inspection reports, Certificate register	Daily	Contractor's Supervisors and Safety officers, drivers, and plant operators.
8	PPE issue register.	Provide appropriate PPE to project workers	PPE Register	Annually	Contractor's OHS team and Stores Officer
10	Safety Toolbox Talk	Train all project workers on safety procedures during the project	Attendance register	Daily	Project Supervisor, Contractor's OHS team
15	Lever hoist and chain block inspection.	Inspect lever hoist and chain block	Inspection reports	Monthly	Crane operator and Contractor's OHS team
	Trip management tracker	Institute monitoring system to track trips for all project vehicles	Vehicle movement reports	Daily	Contractor's Supervisor

	Vehicle/Equipment maintenance log	Ensure all project plants, machinery and vehicles are in good working condition	Maintenance Log,	Monthly	Contractor's Supervisor
	Weekly journey log and checklist	Record and review vehicle journeys, check vehicle readiness	Journey logs, vehicle checklists	Weekly	Drivers, Contractor's Supervisor and OHS team
	Drivers register	Maintain updated list of all qualified and approved project drivers	Drivers register	Quarterly or as changes occur	Contractor's Supervisor
	Driver code of conduct (COC) etc	Develop, communicate and enforce driver behaviour expectations and safety rules	Signed COC forms, disciplinary records, training attendance logs	Once	Contractor's Supervisors and OHS team