HEALTH AND SAFETY MANAGEMENT PLAN (HSMP) FOR THE CONSTRUCTION OF MEDIUM VOLTAGE LINES IN KARONGI AND RUTSIRO DISTRICTS.

Prepared by:
KABANDA Philbert
Lead EIA Expert (RAPEP/EA/021)
Certified Valuer (RC/IRPV/169/2018)

Reviewed by:
TUYISHIME Pascal: Environmental Safeguards Specialist/EDCL
Willy UWIZEYE: Social Safeguards Specialist/EDCL

Reviewed and approved by SABA ENGINEERING PLC (RESSP Supervising Firm)

February 2020
Contents

0. List of abbreviation ......................................................................................................................... 5
1. Introduction ........................................................................................................................................ 6
  1.1. EHSP objectives .......................................................................................................................... 6
  1.2. CEC Occupational Health and Safety System ............................................................................. 7
2. Project Details .................................................................................................................................... 7
  2.1. Scope of Project .......................................................................................................................... 7
  2.2. Company organization and personnel ....................................................................................... 7
  2.3. Company organizational chart .................................................................................................. 9
3. Implementation Plan and Methodology .......................................................................................... 11
4. Roles and Responsibilities .............................................................................................................. 14
  4.1. Details of persons on the project with Health and Safety responsibilities ............................... 14
  4.2. CEC’s responsibilities ................................................................................................................ 14
  4.3. Subcontractors (If Applicable) .................................................................................................. 15
  4.4. Workers ...................................................................................................................................... 16
5. Policy and Legal Framework .......................................................................................................... 17
  5.1. Legal Framework ....................................................................................................................... 17
  5.2. Policy framework ...................................................................................................................... 18
  5.3. World Bank Environmental and Social Framework (ESF) ....................................................... 19
  5.4. IFC Environmental, Health and Safety Guidelines ................................................................. 20
  5.5. Health & Safety Policy ............................................................................................................. 20
  5.6. Additional Policies .................................................................................................................... 22
6. Risk Management ............................................................................................................................. 24
  6.1. Identifying Hazards and Managing Risks ................................................................................... 24
  6.2. Hierarchy of Control .................................................................................................................. 24
  6.3. Take 5 Safety Process ................................................................................................................. 25
  6.4. Procedures and Safe Work Guidelines ...................................................................................... 25
  6.5. CEC Cease Work Authority .................................................................................................... 26
7. High Risk Construction Work ......................................................................................................... 27
  7.1. High Risk Work ........................................................................................................................ 27
  7.2. Work in vicinity or on High Voltage Equipment ....................................................................... 28
  7.3. Hazardous Material Substances ............................................................................................... 28
7.4. Confined Space Work .......................................................................................................................... 28
8. Emergency and Incident Response ........................................................................................................... 30
  8.1. Emergency Preparedness ...................................................................................................................... 30
  8.2. Notifiable Incidents ............................................................................................................................... 31
  8.3. First Aid ............................................................................................................................................... 32
9. Site Insurance ........................................................................................................................................... 32
  9.1. Scope of Cover ...................................................................................................................................... 32
10. Induction and Training .............................................................................................................................. 34
  10.1. Worker Induction ............................................................................................................................... 34
  10.2. Worker Training ............................................................................................................................... 34
11. Consultation and Communication .......................................................................................................... 35
  11.1. Consultation ....................................................................................................................................... 35
  11.2. Communication ............................................................................................................................... 35
  11.3. Disciplinary Measures ...................................................................................................................... 35
  11.4. Sexual harassments and .................................................................................................................. 36
  11.5. Gender Aspects .................................................................................................................................. 36
12. Site Safety Procedures .............................................................................................................................. 37
  12.1. Site Rules .......................................................................................................................................... 37
  12.1.1. Site Rules Overview .................................................................................................................... 37
  12.2. Site Amenities .................................................................................................................................... 38
  12.3. Mobile Phone use on site .................................................................................................................. 38
  12.4. Site Security ...................................................................................................................................... 38
  12.5. Site Signage ....................................................................................................................................... 38
  12.6. Personnel Protective Equipment ...................................................................................................... 39
13. Managing Construction Hazards Specified in Regulations ........................................................................ 41
  13.1. Falls from Height ............................................................................................................................. 41
  13.2. Falling Objects .................................................................................................................................. 41
  13.3. Excavation Work and Trenching ....................................................................................................... 42
  13.4. Working near Overhead or Underground Essential Services .......................................................... 42
  13.5. Electrical .......................................................................................................................................... 43
  13.6. Plant and Equipment ......................................................................................................................... 44
  13.7. Scaffolds ............................................................................................................................................ 45
14. Managing other Construction Hazards ........................................................................... 47
14.1. Ladder Safety ........................................................................................................... 47
14.2. Manual Handling ...................................................................................................... 47
14.3. Slips, trips and fall ..................................................................................................... 47
14.4. Hand Operated and Power Tool Use ....................................................................... 47
14.5. Site Traffic Movements and Mobile Plant ................................................................. 48

15. Audits and Inspections ................................................................................................. 48
15.1. Walk, Observe and Communicate ............................................................................ 49
15.2. Weekly Safety Inspections ....................................................................................... 49
15.3. Targeted Inspections ............................................................................................... 50

16. Safe Work Method Statements and Job Health and Safety Analysis ....................... 51

17. Issue Resolution ........................................................................................................... 52

18. Condom provision ....................................................................................................... 52

19. Filling and management of HS documents ................................................................ 52

ANNEXES ......................................................................................................................... 53

Annex 1: Incident report template .................................................................................... 53
Annex 2: Take 5 Checklist .................................................................................................. 56
Annex 3: List of Content for a basic First Aid Kit .............................................................. 57
0. List of abbreviation

CEC: Century Engineering Company

EDCL: Energy Development Corporation Limited

ESF: Environmental and Social Framework

ESS: Environmental and Social Standard

HSMP: Health and Safety Management Plan

HSMS: Health and Safety Management System

JHSA: Job Health and Safety Analysis

IFC: International Finance Corporation

HS: Health and Safety

STD: Sexually Transmitted Diseases

PPE: Personal Protective Equipment

SWMS: Safe Work Method Statements

WOC: Walk Observe Communicate
1. Introduction

1.1. EHSP objectives

The objectives of this Environmental, Health and Safety Plan for the construction of medium voltage in Rutsiro and Karongi Districts are as follows:

- Promote a safe work environment free from recognized hazards to workers, the environment and the public. Commit resources to detect hazards and ensure hazard correction.
- Achieve an incident-free project by advocating the belief that all incidents are preventable. Encourage consultants and contractors selected to work on this project to share and promote that same belief.
- Verify that safety policies and procedures are in place to assure worker and public health and safety as well as to promote natural capital.
- Ensure waste management and clearness environment.
- Enlist employee involvement with project safety to improve the quality of safety and health. This includes brainstorming, inspecting, detecting and correcting, from project startup to project completion.
- Ensure that all employees, consultants, and contractors have the knowledge, awareness, and training to accomplish the task ahead.
- Implement emergency response plans and procedures. Provide effective project communication plans and equipment.

It is to provide a summary of the procedures that will apply during the project implementation in order to manage the Health & Safety on site. The plan is based on the policies and procedures of CEC’s management system and references should be made to these policies and procedures for further details.

CEC will:

- Make this plan available to all workers on this project and ensure they have the opportunity to read, understand, clarify and ask questions.
- Keep a copy of the Health and Safety Plan readily available for the duration of the project or longer as required under the laws of Rwanda.
- Review the plan regularly throughout this project and make any revisions known to those working on the project.
Promote and enhance the focus on safety and lead by example with evaluating, anticipating, minimising and controlling high risk activities.

Prepare implementation report on a monthly basis.

1.2. CEC Occupational Health and Safety System

CEC Ltd is committed to providing a safe environment for all employees and has in place a Healthy & Safety Management Systems (HSMS) that is in accordance with the National Health Policy (2016), National Sanitation Policy (2016), National Occupational Health and Safety Strategy (2019), Law Regulating Labour in Rwanda (2009), Ministerial Order determining modalities of establishing and functioning of occupational health and safety committees (2012) and the Ministerial Order determining conditions for occupational health and safety (2012). Throughout the project and in line with the HSMS, safety performance will be continuously monitored and work instructions reviewed with the aim of eliminating risk as far as is reasonably practicable.

2. Project Details

2.1. Scope of Project

CEC has been engaged by EDCL as Contractor to construct medium transmission lines and installation of transformers and house connections in two districts of Rutsiro in Nyabirasi, Kivumu, Murunda, Mukura and Mubuga Sectors and Karongi in Gitesi, Rugabano, Mutuntu, Twumba, Rwankuba and Rubengera Sectors.

2.2. Company organization and personnel

The contractor is Century Engineering Contractors Limited (CEC Ltd) and is a subsidiary of EPC Africa Group which is based in Kigali. CEC Ltd is specialized in High Voltage Transmission Lines Construction and rendering technical services to the energy and infrastructure sectors in Africa. The Group focuses in engineering, procurement, Construction, power generation, transmission and distribution.

The Company combined Vision and Mission are to build affordable Energy and Tele-Communication infrastructures to all corners of the Livable Environment on the African Continent. CEC Ltd has vast experience in the following core activities: Construction Project Management, Compliance & Quality...
control, Project Supervision, Turnkey project, Conceptual and preliminary design, leading in health, safety and environmental performance, Delivering on our promises & client vision and Systems re-engineering review and audit. A team composed of Project Manager, Engineers, Environmentalist, Health and Safety officer, Surveyors, technicians and casual labour shall be deployed on site.
2.3. Company organizational chart
HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

**Project Team**

- CEO
- PIC Team / MD
- Project Manager
  - Site Manager
  - EHS Manager/Administration
  - Accountant
  - Project Designer
  - Valuer
    - Surveyor
    - Technician
  - Assistant EHS
  - Manpower
    - Driver
  - Foreman
  - Store Manager
  - Linesman
  - Manpower
3. Implementation Plan and Methodology

CEC will take care on Incident notification, Investigation and Reporting.

A. Incident Notification

The Project Management shall be verbally notified by the site management team as soon as possible of incident on the project that causes the death of a person. In less than 24 hours shall be notified in writing (preliminary report). The Project Management shall in turn inform the Client/Client Representative verbally and a written notification sent (Final report) in less than 24 hours. Work shall be stopped in case of a serious incident. An incident report template is annexed.

B. Incident Investigation

i. An incident investigation should begin immediately after the emergent crisis is controlled.

ii. First ensure that the incident scene is safe for emergency responders; and provide appropriate care to all injured persons. Call for additional resources to care and transport the injured parties as needed.

iii. A written incident investigation report (Annex 1) shall be completed by the jobsite supervisor.

iv. Each incident shall be investigated to the degree necessary by the personnel designated by the Project Management. Each investigation shall result in a report of the incident and the corrective action taken to prevent this from happening again.

v. Physical evidence should be preserved to the fullest extent possible until the investigation is complete. This can be achieved by barricading the accident scene and instructing workers to stay away from the scene, and stop all works.

vi. Work should not be resumed in the area until a directive from the investigating person in charge is received.

vii. Incidents other than minor injuries that are easily treatable on the job, photographs should be taken of the incident scene and any equipment involved as soon as possible after the event.
viii. Investigators should identify those persons who were eye witnesses (primary witnesses) or who claimed to have seen or have knowledge of the incident (secondary witnesses). The identity of each witness should include their name, address, telephone number, and employer and site location.

ix. Investigators should also obtain facts such as time of day, conditions, weather, temperature, wind, and other details that are requested on the report forms.

x. Through interviewing the witnesses, obtain information regarding how the incident happened. The purpose of the investigation is to obtain facts, not assess blame.

xi. Concentrate on the facts; find out “who, what, where, when, why and how.” After obtaining necessary information, the incident investigation report should be completed (Final Incident Report) a copy of which shall be sent to client representative Project Manager.

xii. In case a worker gets injured during the incident and dies, then the employer of the worker shall notify the area Labour office within 24 hours. However, where there is no fatality, The Labour office shall be notified in writing before 7 days elapse.

xiii. When an accident in a workplace, causes the death of a person therein, the employer shall:
   o Inform the area Labour Office in less than 24 hours of the occurrence of the accident and,
   o Send a written notice of the accident in the prescribed form to the area Labour Office within seven (7) days of the occurrence of the accident.

C. Incident Review & Root Cause Analysis

   i. The incident report should be completed immediately after the incident has been brought to its conclusion.

   ii. This report will be used to perform root cause and causal factors analysis. This causal analysis team will be led by the HS Staff and will include the crew leader and manager whose team was involved in the incident.

   iii. The results of this process, lessons learned and corrective actions shall be shared in a formal report.
D. Incident Report

i. The incident report should be placed in the jobsite incident file with copies faxed or emailed to the company’s main office.

ii. Jobsite supervisors are responsible to see that the reports are completed and a root cause analysis is done on any significant incident.

iii. All corrective actions identified shall be implemented and verified by the site Manager.

iv. Project Manager shall ensure that the corrective actions are completed.

v. In certain circumstances additional personnel from our customer’s staff, insurance personnel, attorneys, regulatory agency personnel or police officers may also be part of the investigating team. All Project personnel are directed to assist with the legal requests for information from these parties. Please cooperate with the requests of these personnel, if there are any questions direct them to the HS Manager.

vi. All serious incident reports will be retained for a minimum of at least three (3) years beyond the date of the end of the investigation.

E. Incident Compensation

i. The approved reports on injuries and root causes analysis shall be used to compensate the injured workers;

ii. The compensation shall be provided as per insurance scheme of the Contractor and contract between the contractor and workers.

iii. The lost working day due to occupational hazard shall be paid in full to the concerned worker.
4. Roles and Responsibilities

4.1. Details of persons on the project with Health and Safety responsibilities

<table>
<thead>
<tr>
<th>POSITION</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td>Managerial leadership and commitment to safe systems of work for all site activities. Monitoring and enforcing compliance with site and legislative requirements. Promote a health and safety culture</td>
</tr>
<tr>
<td>Construction Manager</td>
<td>Management of site personnel and contractors: involvement in the development and maintenance of safe systems of work to manage risks so that the site and legislative requirements are being applied</td>
</tr>
<tr>
<td>HS Manager</td>
<td>Worker and contractor consultation encouraging site health and Safety implementation and ownership within the care and maintenance team Review and promote all safe systems of work in accordance with the safe work method statements (SWMS)&amp;Job Safety and Health Analysis (JSHA) developed on the project, ensuring that all practices to be undertaken are carried out to the applicable legislation and site rules. Undertaking frequent site inspections and audits. Carry out toolbox meetings, induction training, sites rules clarification and awareness on STD, Ebola and Malaria. Ensure condoms are provided on site on regular basis at well designated areas such as the toilets.</td>
</tr>
<tr>
<td>Varying Roles</td>
<td>Actively apply the rules and requirements of this EHSP, site requirements and all legislative requirements described in the EHSP and regulations</td>
</tr>
</tbody>
</table>

4.2. CEC’s responsibilities

CEC shall be responsible for:
HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

- Preparing, updating and implementing this H&S Management Plan, including all associated procedures,
- Identifying and observing all relevant legal HS requirements
- Managing risks associated with the carrying out of construction or demolition work in accordance with the HS Act and Regulation.
- Reviewing SWMSs and SHAs prepared by contractors on the project
- Planning to do all work safely
- Identifying HS training required for an activity
- Verifying that workers have undertaken identified HS training
- Communicating and consulting with workers
- Investigating hazard reports and ensuring that corrective actions are undertaken
- Dispute resolution
- Continual review and monitoring of construction activities, sequence, process and procedures
- Ensuring that the right plant, equipment and personnel to operate are applied to the task
- Follow the safe work method, identify, control and manage risks associated with the task in their job description and compensate for the relevant risks created, associated with the unsafe conditions created in the workplace.
- Investigating and reporting incidents

4.3. Subcontractors (If Applicable)

Sub-Contractors engaged for this project by CEC (whenever necessary) are responsible all formatters including:

- Fulfilling the duties of CEC for their own operations
- Managing risks associated with the carrying out of construction or demolition work in accordance with the HS Act and Regulation
- Planning to do all work safely
- Identifying all high risk construction or demolition work associated with their activities and ensuring SWMS and JSAs are developed and implemented
- Following all safety policies and procedures and site rules
- Complying with this H&S Management Plan
- Complying with any direction given to them by the principal contractor
HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

- Undertaking site-specific induction before starting work and signing off that they have completed this induction
- Ensuring the workers, they engage undertake site specific inductions
- Ensuring they have the correct tools and equipment and these are in a serviceable condition for the task
- Follow the safe work method and identify and control the risks associated with the task in their job description.

4.4. Workers

All workers on this project (including those employed by subcontractors) are responsible for:

- Taking reasonable care of their own health and safety
- Taking reasonable care that their conduct does not adversely affect others
- Complying with instruction, so far as they are reasonably able
- Cooperating and complying with reasonable notified policies and / or procedures
- Raising concerns where uncontrolled risk is evident and the task cannot be completed safely
- Reporting any incident or unsafe condition as soon as reasonably practicable
- Assisting in incident investigations (where required)
- Only operating plant and equipment that they hold current certification and Verification of Competency for
- Presenting to work in a fit condition free from fatigue, alcohol or other drugs.
5. Policy and Legal Framework

The Republic of Rwanda has developed laws, policies and strategies; legal instruments and institutional framework for labour, occupational health and safety, sanitation and working conditions. CEC is committed to comply and enforce those laws, policies, strategies and all legal instrument during the construction of the transmission lines in Rutsiro and Karongi as detailed below.

5.1. Legal Framework

<table>
<thead>
<tr>
<th>Law/Regulation/Order</th>
<th>Objective</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Constitution of the Republic of Rwanda, 2003 as revised in 2015</td>
<td>The 2015 Rwandan Constitution Articles 45 aim at the promotion of activities for the good health. It stipulates that all Rwandans have the right to good health, everyone has the right to live in a clean and healthy environment and the State also has the duty, within its means, to undertake special actions aimed at the welfare of workers.</td>
<td>CEC will comply with the Constitution by implementation of applicable laws and ensure employees work in a good health, clean and safe environment and ensure welfare of all its workers.</td>
</tr>
<tr>
<td>Law Regulating Labor in Rwanda, 2009</td>
<td>This law applies employment relations based on employment contract, apprentices, interns, self-employed person, informal sector, occupational health and safety and the right to form trade unions and employers’ associations.</td>
<td>CEC will abide in good conducive working conditions during the implementation of the project. Labor law will be used to ensure good working conditions and wellness. All forms of discrimination will be avoided during recruitment of workers.</td>
</tr>
<tr>
<td>Ministerial Order determining modalities of establishing and functioning of occupational health and safety committees</td>
<td>This Order determines modalities of establishing and functioning of occupational health and safety committees.</td>
<td>As a good practice, health and safety will be given a priority by ensure regular toolbox meetings on health and safety during construction.</td>
</tr>
</tbody>
</table>
Law/Regulation/Order | Objective | Relevance
---|---|---
functioning of occupational health and safety committees, 2012 | | construction. Health and safety committees will be established and governed by this ministerial order during project implementation.

Ministerial Order determining conditions for occupational health and safety, 2012 | This Order determine the general and specific rules and regulations relating to health and safety at workplace in order to secure the safety, health and welfare of persons at work and protect them against risks to safety and health arising from work | As a good practice, health and safety will be given a priority by ensure regular toolbox meetings on health and safety during construction. Health and safety committees will be established and governed by this ministerial order during project implementation.

5.2. Policy framework

<table>
<thead>
<tr>
<th>Policy, Plan, Strategy</th>
<th>Objective</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Health Policy, 2016</td>
<td>One of the objectives of Rwanda Heath Sector Policy is to improve the quality of life and demand for services in the control of disease. The policy identifies the most common illnesses as a result of unhealthy living or working environment.</td>
<td>CEC Ltd will comply with this policy by ensuring health safety and the good working conditions and implement awareness programme on HIV Aids, STD, Malaria and Ebola to workers.</td>
</tr>
<tr>
<td>National sanitation policy, 2016</td>
<td>The policy provides for decentralization in line with the national decentralization policy, institutional aspects, integrated watershed management, monitoring and</td>
<td>CEC Ltd will comply with this policy by ensuring working conditions of all the workers have proper sanitation by providing</td>
</tr>
</tbody>
</table>
HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

<table>
<thead>
<tr>
<th>Policy, Plan, Strategy</th>
<th>Objective</th>
<th>Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Occupational Safety and Health Strategy, 2019</td>
<td>assessment and participatory approach to water and sanitation among other sectoral reforms in Rwanda</td>
<td>good and clean toilets and cleanliness on site.</td>
</tr>
<tr>
<td>Environmental Health Policy, 2008</td>
<td>It aims at providing a framework for coordination of OSH activities among public, private, employees organizations and civil society institutions</td>
<td>This policy will govern CEC project implementation by establishing safety and health standards at workplace and ensure compliance with occupational safety and health standards.</td>
</tr>
<tr>
<td>Environmental Health Policy, 2008</td>
<td>The overall objective of the Environmental Health Policy is provision of adequate environmental health services to all Rwandans with their active participation.</td>
<td>CEC will comply with this policy by providing good environmental, social, health and safety working conditions to workers and neighboring residents.</td>
</tr>
</tbody>
</table>

5.3. World Bank Environmental and Social Framework (ESF)

The new World Bank Environmental and Social Framework (ESF) has 10 key Environmental and Social Standards (ESS) and the construction of medium transmission lines in Rutsiro and Karongi Districts shall trigger ESS2 on Labour and Working Conditions.

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions.

The Project triggers this policy because the construction of medium voltage transmission lines will utilize people in the day to day working on to the projects and these persons need to be treated according to the ESF where the work conditions must meet the required standards.
5.4. IFC Environmental, Health and Safety Guidelines

Under these guidelines, contractors have the obligation to implement all reasonable precautions to protect the health and safety of workers. They provide guidance and examples of reasonable precautions to implement in managing principal risks to occupational health and safety. Although the focus is placed on the operational phase of projects, much of the guidance also applies to construction and decommissioning activities. Contractors should have the technical capability to manage the occupational health and safety issues of their employees, extending the application of the hazard management activities through formal procurement agreements.

CEC shall introduce preventive and protective measures according to the following order of priority:

- Eliminating the hazard by removing the activity from the work process. Examples include substitution with less hazardous chemicals, using different manufacturing processes.
- Controlling the hazard at its source through use of engineering controls. Examples include local exhaust ventilation, isolation rooms, machine guarding, acoustic insulating.
- Minimizing the hazard through design of safe work systems and administrative or institutional control measures. Examples include job rotation, training safe work procedures, lock-out and tag-out, workplace monitoring, limiting exposure or work duration.
- Providing appropriate personal protective equipment (PPE) in conjunction with training, use, and maintenance of the PPE. The application of prevention and control measures to occupational hazards should be based on comprehensive job safety or job hazard analyses. The results of these analyses should be prioritized as part of an action plan based on the likelihood and severity of the consequence of exposure to the identified hazards.

5.5. Health & Safety Policy

At CEC we are committed to managing the impact of our business activities on the Health, Safety and Environment of our Workers, Contractors, Visitors and the local community. In
fulfilling this responsibility, we have a duty of care to provide so far as practicable, a working environment that is safe and without risks to health, through processes that:

- Identify, analyze, evaluate or manage risks that could cause an incident, injury or illness to people, property damage or unacceptable impacts on the environment or the community.
- Assist workers, contractors and visitors to meet their HS obligations
- Provide compliance with relevant HS legislation and conditions of licenses under which we operate.
- Consider both long term and short term health, safety, environmental and community impacts when making decisions

Management is committed to:

- Providing leadership and encourage people in an active way to take responsibility and be accountable for their own safety and that of others.
- Undertaking Risk Management activities to manage risks to people in the work environment, including review of work methods and practices
- Compliance with all relevant legislation standards, and other requirements to which CEC subscribes.
- Providing HS&E training to all workers
- Providing information, resources and supervision enabling workers to undertake their work in a healthy and safe manner
- Consultation with all workers and contractors to enhance the effectiveness of the HS system
- Ensuring that plant, equipment and substances are safe and without risk to health when used in accordance with standard operating procedures
- Providing, monitoring and maintaining systems for safe use, handling, storage and transportation of plant, equipment and substances
- Workers & Contractors are required to:
  - Carry out work safely and without harm to themselves, others, property or the environment and in accordance with their training, operating procedures and work instructions.
  - Stop or not start activities that they believe carry an unacceptable level of risk to themselves and others.
  - Comply with CEC Safety Management Plan, HS Policies, HS Procedures and programs
as appropriate.

- Undertake risk assessments of tasks prior to commencing the work.
- Actively participate in the reporting of incidents including Personal Injury, Property Damage and Near Misses.
- Report any hazards observed in the workplace or deficiencies with work procedures in a timely manner.
- Report any unsafe conditions or environmental issues/concerns that come to their attention.
- Ensure appropriate fitness for work and able to perform the task at hand.
- Ensure all personnel performing works are adequately trained and competent to perform such works.

5.6. Additional Policies

Alcohol and Other drugs policy

In accordance with CEC Alcohol and Other drugs policy, all its employees executing works during the project shall not be under influence of alcohol or any controlled substances. This policy shows our commitment to health and safety in this workplace, and reducing the risks to the health and safety of all workers, contractors and visitors our commitment to complying with the health and safety requirements and rules, especially those for drugs and alcohol how we will deal with drugs and alcohol use and/or their effects in the workplace.

This policy applies to everyone at the Project sites

**Effect**

Drug and alcohol use can affect a person’s ability to work safely. It creates a risk to workers and work health and safety.

**Responsibilities**

No one must drink alcohol or use drugs at this workplace, except: for legitimate medical reasons: You must notify your supervisor if prescribed medication is likely to affect your
behavior and therefore work health and safety. Your supervisor may assign you other duties while you’re taking the medication at workplace-based social events. The manager/supervisor at this workplace must, if they have reasonable grounds for believing that you are incapable of safely performing your duties or may be a risk to others due to the effects of drugs or alcohol, arrange for you to be removed safely from the workplace.

Each person must ensure that they are not, by the consumption of drugs or alcohol, in such a condition as to endanger their own safety or that of others at this workplace. This includes not coming to work if, after drinking or using drugs in your social time, your ability to work safely is still impaired. If you come to work, you must report it to your supervisor, who may assign you other duties or arrange for you to be removed safely from the workplace.

**Managing drugs and alcohol**

CEC will identify all workplace factors that may influence someone to turn to drugs or alcohol, and use the hazard management process to eliminate drug or alcohol use or control the risks from them. CEC will consult with workers, work health and safety representatives and/or the work health and safety committee on this issue.

**Disciplinary action**

If anyone is found to breach this policy, management will take disciplinary action such as giving a formal warning, followed by encouraging them to get treatment, suspension, and/or finally dismissal.
6. Risk Management

6.1. Identifying Hazards and Managing Risks

CEC will ensure systems and approaches for identifying hazards and assessing risk are in place prior to any activities commencing on site and shall utilize the Hierarchy of Controls in conjunction with:

- The Occupational Health and Safety Requirements
- Using a risk management form to control general construction risks where necessary
- Carrying out regular site inspection and audits with a focus on a changing work environment.

CEC will also identify risks (as appropriate):

- Before introducing any new equipment
- When introducing a new task
- When new information is received about tasks, procedures, equipment or chemicals.

All hazards that are identified throughout the project will be reported immediately assessed and controlled to levels as reasonable practicable and in accordance with CEC procedure. CEC will inform workers and subcontractors of its risk management procedures and require they are trained in risk management (Induction and Training).

6.2. Hierarchy of Control

CEC where reasonably practical, will manage all risks identified by applying the Hierarchy of Controls as follows:

![Hierarchy of Controls Diagram]

Where practical, the Principal Contractor and the contractors (as appropriate) will implement risk controls that are high in the order of hierarchy and will implement multiple controls where
necessary.

6.3. Take 5 Safety Process

A take 5 safety checklist (Annex 2) is a tool used to identify health and safety hazards before starting work in a site. Performing health and safety checks using the take 5 procedure and helps workers and contractors mitigate exposure to hazards and health risks.

CEC will provide Take 5 forms to all staff for performing a final safety check before commencing work. This is to ensure that all work activities are given a final check to identify and control any potential hazards that may have not already been addressed prior to commencing activities. It is designed to complement the risk Assessment process. It does not act as a replacement for formal risk assessment.

Take 5 process consists of the following 5 steps

<table>
<thead>
<tr>
<th>STEP 1</th>
<th>Stop, step back, observe</th>
<th>Observe the work area and surrounding location for hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEP 2</td>
<td>Think through the task</td>
<td>Consider the sequence of steps involved in carrying out the task from start to finish</td>
</tr>
<tr>
<td>STEP 3</td>
<td>Identify any hazards</td>
<td>Identify the hazards associated with the task including any present in the immediate and surrounding work area, and hazards generated by the task</td>
</tr>
<tr>
<td>STEP 4</td>
<td>Control the hazards</td>
<td>If the hazard is not controlled and the work area not safe-do not start work, report to your Team Leader/Unit Controller/Line Manager to review the risk assessment</td>
</tr>
<tr>
<td>STEP 5</td>
<td>Complete the task safely</td>
<td>Once all control measures have been implemented-commence the task</td>
</tr>
</tbody>
</table>

6.4. Procedures and Safe Work Guidelines

These are an integral part of Risk Management process as it outlines the hazards, risks and associated control measures to be applied to ensure the task/activity is conducted in a way to reduce the risk of injury. They are documented and provide standard and useful information on a large range of on-site activities. Information within these documents should be used in conjunction with the Project procedures.
6.5. CEC Cease Work Authority

All the personnel will be empowered and supported by management with the right, responsibility and authority to cease or stop work when observing an unsafe condition or act that could result in harm to staff. It involves a stop, notify, correct and resume approach for resolving the situation or condition. Once such a situation arises the personnel shall immediately notify the Project Leader and EDCL representative to advise the reason for ceasing or stopping work.

CEC Project Leader will work with EDCL to resolve issues by taking appropriate measures to assess the risk eliminate or control the hazard and to record the hazard in line with the appropriate reporting procedures.
7. High Risk Construction Work

7.1. High Risk Work

CEC Project Team has identified activities for this project and will develop risk classifications for each of the High Risk Construction Work activities. Additional SWMS’s and JHSA’s will also be formulated for any additional high risk work that will be introduced or identified as the project progresses.

<table>
<thead>
<tr>
<th>S/N</th>
<th>HIGH RISK at CONSTRUCTION WORK</th>
<th>PROJECT SPECIFIC EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Work that involves a risk of a person falling more than 2m</td>
<td>Cables fixing and stringing of conductors and transformer installation.</td>
</tr>
<tr>
<td>2</td>
<td>Work that involves the demolition of an element of a structure that is load bearing or otherwise related to the physical integrity of the structure.</td>
<td>Corridor clearance or changing conductors and poles for some reasons.</td>
</tr>
<tr>
<td>3</td>
<td>Work that involves structural alterations or repairs that require temporary support to prevent collapse</td>
<td>Construction of a line bay and its associated accessories</td>
</tr>
<tr>
<td>4</td>
<td>Work that is carried out in or near a confined space</td>
<td>Excavation for poles, Cable installation</td>
</tr>
<tr>
<td>5</td>
<td>Work carried out in or near trench with excavated depth greater than 1.5m</td>
<td>Excavation for poles or installation of transformers</td>
</tr>
<tr>
<td>6</td>
<td>Work that is carried out or near energized or charged electrical equipment or services</td>
<td>Excavations, installation of transformers, erection of poles</td>
</tr>
<tr>
<td>7</td>
<td>Work that is carried out in or adjacent to a road</td>
<td>Digging holes for poles, conductor stringing.</td>
</tr>
<tr>
<td>8</td>
<td>Work that is carried out in an area at a workplace in which there is any movement of powered mobile plant</td>
<td>Transportation of materials in and around the site, loading and off-loading material</td>
</tr>
</tbody>
</table>
Prior to starting work on the project, CEC will provide completed health and safety documents and will be filed in the project folder, which forms part of and supports this HS Management Plan. These documents will be retained for the duration of the project and archived as required as the national laws.

CEC will review the documents and the HSMP where:

- There is a need to change the method of carrying out of the high risk construction work
- A risk has been identified that is not included and managed within the HS Management Plan

### 7.2. Work in vicinity or on High Voltage Equipment

Procedure isolation for making equipment “dead” and safe to work

- Switch off
- Isolate
- Lock off point of isolation
- Apply caution notice at point of Isolation
- Test for absence of voltage using a test instrument
- Test the instrument is in good working condition
- Apply circuit main earths
- Apply temporal at point of work
- Issue a Permit to Work

### 7.3. Hazardous Material Substances

CEC has undertaken a Hazardous Material Assessment to assess all areas of the project sites and identify the material at site and those to be brought as the project progresses with recommended best practice to remove or contain.

### 7.4. Confined Space Work

There are locations on the project site that will be deemed a confined space meaning an enclosed or partially enclosed space that:

- I. Is not designed or intended primarily to be occupied by a person; and
- II. Is, or is designed or intended to be, at normal atmospheric pressure while any person is in the space; and
- III. Is or is likely to be a risk to health and safety from
IV. An atmosphere that does not have a safe oxygen level; or
V. Contaminants, including airborne gases, vapors and dusts, that may cause injury from fire or explosion; or
VI. Harmful concentrations of any air borne contaminants; or
VII. Engulfment

A risk assessment shall be performed and that confined space control measures will be put in place prior to any confined space permit being issued. This includes but is not limited to air quality monitoring, access, first aid and rescue requirements, proper sign posting, personnel entry recording and monitoring.
The confined space procedure shall be reviewed and accepted prior to any such work being undertaken. The Project Team representative shall be notified at the time any confined space is about to be entered as well as the completion of the work.
8. Emergency and Incident Response

8.1. Emergency Preparedness

In relation to emergency preparedness and response in case of emergency or incident CEC Ltd will:

- Train and test all workers regarding emergency plan (including emergency muster points) as part of their induction (this is included in the induction presentation)
- Display emergency procedures in the site office or other visible location
- Check and mark fire extinguishers as service able at the beginning of each project and maintain three-monthly inspections thereafter.
- Train and test personnel on site in relation to the correct use of firefighting equipment
- Ensure that first aid trained personnel are identified and that first aid facilities are available
- Ensure that hazardous materials are removed where possible or identified and controls in place prior to works taking place.

**Emergency Procedure:** In the event of a fire or similar emergency evacuation, CEC Emergency Plan requires hat on-site personnel:

- Stop work immediately and the work place be vacated if in imminent danger
- Assist anyone in the work place that may not be familiar with the evacuation procedures
- Call emergency services on 999 from a mobile phone. Other emergency numbers are on display in the site office.
- Notify EDCL as soon as reasonably practical
- Assemble in the nominated assembly points until you receive further instructions from the principal contractor or emergency services personnel.
- Notify Project site security as soon as practicable and give details of the event and location that an emergency has taken place.

**Emergency Muster Point**

The Project site emergency muster point will be on the area outside the main gate for the campsite and store. Dependent on the project activity location and due to the vast size of the site, additional muster points may be allocated or established on differing locations.
Emergency Contact List for Site

CEC will maintain emergency contact details for all workers onsite. If an incident occurs at the work place the procedure is:

- Immediately notify EDCL Project Leader and safeguards.
- Not interfere with the scene of the incident
- Depending on the nature and severity of the injury, CEC will notify the Police and local authorities.

CEC will record details of the incident and will ensure any remedial action is taken.

<table>
<thead>
<tr>
<th>MERGENCY NUMBERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fire Brigade</td>
</tr>
<tr>
<td>2. Police/ Emergency</td>
</tr>
<tr>
<td>3. Ambulance</td>
</tr>
<tr>
<td>4. Traffic Accident</td>
</tr>
<tr>
<td>5. Maritime Security</td>
</tr>
<tr>
<td>6. Site Engineer</td>
</tr>
<tr>
<td>7. HS Officer</td>
</tr>
</tbody>
</table>

8.2. Notifiable Incidents

CEC Management will report the following incidents to the client:

- A fatality
- An incident requiring hospitalization
- Major injuries
- Near miss

In the event of such an occurrence:

- Notify the EDCL Project Manager immediately
- Report the incident with a root cause analysis of the incident within 48hours
- Do not disturb the site until given clearance by EDCL Project Manager
- EDCL will confirm the reporting requirements by the local authorities and the National Police
- EDCL shall only give permission to disturb the site when notified by the Police
after investigation if a formal investigation is not required
  o If a formal investigation is required, EDCL will secure the site
  o EDCL and CEC will ensure that corrective actions are completed adequately

8.3. First Aid
Depending on the location of works, the requirement of a first aid provision will alter. CEC shall provide first aid kits where staff is required to work in remote stations. First aid kits will be located in company owned vehicles or other locations as determined by the project site. Snake bite kits will also be carried when working in remote locations or on green field sites
  o If anyone becomes aware that an item of first aid is out of stock or out of date, they are to notify the Project Team Leader immediately.
  o First aid should be administered by trained first aid personnel.
CEC shall ensure that their work force consists of qualified First Aid personnel and supply adequate First Aid equipment whose content is provided in annex 3..
In the event of a person being injured, trained first aid personnel should:
  o Stabilize the person and administer first aid
  o Phone an ambulance (depending on the extent of the injuries)
  o Notify CEC and/or EDCL if emergency services are called. In all other circumstances notify EDCL as soon as practicable.
  o Notify site supervisor as soon as practicable and give detail of location where help is required.

9. Site Insurance
9.1. Scope of Cover
The basic concept is to offer contractors’ all risk (unforeseen and sudden physical loss or damage) and adequate protection against loss or damage in respect of the contractor works, construction plant and equipment and or construction machinery, as well as third party claims.
in respect of property damage or bodily injury arising in connection with the execution of a construction project.

- CEC will provide insurance to cover all risk for activities at site in general.
- Each employee must have his/her personal health insurance such as MUTUELLE DE SANTE.
10. Induction and Training

10.1. Worker Induction

All personnel entering the main security gate to perform works for the first time within the project site will be required to undergo a Site Induction. In the first induction week training, CEC will invite employer for participation and provide induction report.

Before the starting work at site, it will be a meeting for all workers. For new employees progressively, they will get induction session from HS officer, the experienced workers and the meeting before site work beginning.

This induction includes the following:

- The expectations outlined in this H&S Management Plan, including all policies and procedures
- The emergency musters point
- The site rules
- The facilities
- Any site specific hazards
- High risk construction work activities
- Personal protective equipment required to enter the site
- First aid

10.2. Worker Training

CEC will undertake a training needs analysis for the project to comply with the legislative and HS regulations and will not permit workers to carry out specific work unless they:

- Are trained and competent for the specific work to be undertaken
- Are trained to deal with any risks associated with the specific work and understand the control measures in place
- Have had relevant construction induction training
- On-site training and supervision is provided
- Undertake external training for specific tasks where required
- Have high risk licenses for all high risk work available and a register is maintained
- Training on first aid
11. Consultation and Communication

11.1. Consultation

CEC will consult with all workers on Health and Safety issues for this project:

- At toolbox meetings where anyone can raise issues for discussion
- Informally during the planning of activities or the development of SWMS by workers
- When changes to work place arrangements could affect the health and safety of workers
- During investigations into any incident to establish details of the incident or to formulate corrective action to prevent the incident from re-occurring.
- Formal progress and construction meetings

CEC may plan to invite a doctor or other specialist to do voluntary normal body checking for all employees in order to have general status about health for them.

11.2. Communication

CEC will provide workers with this HS Management Plan before starting work on the project. Records of all communication shall be kept.

CEC will communicate relevant HS information to everyone involved in this project by:

- Inductions
- Pre-start meetings
- Tool box meetings
- Incident reports and outcomes
- Safety signage
- Distributing safety alerts or guidance material about project specific hazards/incidents
- Site Safety Notifications Disciplinary action will be taken against persons that deliberately in fringe the requirements of this plan, the site safety rules or are in breach of other legislative requirements.

11.3. Disciplinary Measures

Disciplinary action will be taken against persons that deliberately infringe the requirements of this plan, the site safety and site rules or are in breach of other legislative requirements.

Disciplinary actions may include
11.4. Sexual harassments and
CEC will work with the local community in order to get information and solve problems related to behaviors of workers out of site; work with the existing neighboring communities of the site work; such as community policing, INCUTI Z’UMURYANGO and so on. That will help in advising the workers and change the behavior. Any sexual harassment shall not be tolerated and immediate dismissal shall be applied and the case reported to competent authorities.

11.5. Gender Aspects
CEC will consider gender aspect in the implementation of the project in compliance with guideline or policy of provided by country.
12. Site Safety Procedures

12.1. Site Rules

Site personnel shall carry out works on site as per the site rules specified in the “Contractor Occupational Health, Safety and Environment Requirements” All persons working on the project sites shall take all reasonable precautions to ensure the Health and Safety of persons including:

- CEC workers and visitors.
- Other Contractors.
- The Contractor’s workers.
- Sub-Contractors.
- Third parties.

CEC shall ensure that any sub-contractors working for the mare familiar with the Contractor HS Requirements.

CEC warrants that they are aware of and will observe the requirements specified in the HS requirements for site with respect of health and safety and the implications there of for the execution of the work under the contract. These requirements constitute:

- The legislation and Codes of Practice set out.
- Induction requirements and information contained therein.
- CEC’s regulations and policies
- Project hazard controls.
- Reasonable directions from the authorized personnel for the purpose of safety compliance.

12.1.1. Site Rules Overview

The “Contractor Occupational Health, Safety and Environment Requirements” is issued to contractors at the tender stage or upon engagement of persons or companies on site through the site induction process.

A copy of the site rules is displayed in the site offices. The site rule topics covered in the Site Induction are general housekeeping are the followings:

- Alcohol and Other Drugs
- No Smoking Policy
- Prohibited Items
- Personal Protective Equipment (PPE)
12.2. Site Amenities

- Toilets and drinking water will be provided on site at nominated locations.
- All workers are to have good hygiene standards and clean up after themselves.
- Demountable amenities may be required if working in remote locations on site.

12.3. Mobile Phone use on site

- The use of personal mobile phones in a work area (non company supplied) is restricted unless agreed arrangements have been made between management and the worker.
- Use of mobile phones is prohibited whilst travelling in a motor vehicle unless the vehicle is fitted with a hands free device.
- Personnel who are carrying mobile phones and are on foot shall cease walking, ensure they are in a safe position before answering, making a call, checking for emails or texting.

12.4. Site Security

CEC will, so far as reasonably practicable, secure the site by:

- Keeping the work area secure during the project
- Erecting a fence at the offices or camp site to prevent unauthorized access where required to do so under the HS Regulation
- Locking gates to the site outside normal hours of operation
- Workers are required to keep the site secure, for example by closing or locking gates and regular inspection and maintenance of security fencing.

12.5. Site Signage

CEC will display signs on the entrance of the camp site including:
The principal contractor’s name, contact details and after-hours telephone number

- Supervisor’s name and contact number
- PPE requirements for entering the site as well as speed limits and any other mandatory requirement asset out signs required HS and ESMP for the project.
- All signage will be clearly visible from outside the work area where the activities are being undertaken.

12.6. Personnel Protective Equipment

CEC will manage the risks associated with construction work by requiring personnel to utilize the Personal Protective Equipment (PPE) provided to workers onsite.

By ensuring that the PPE is:

- Suitable for the nature of the work and any hazard associated with the work
- A suitable size and fit ensuring it is reasonably comfortable for the worker who is to use or wear it
- Maintained, repaired or replaced so that it continues to minimize risk to the worker by:
  - Ensuring it is clean and hygienic
  - Ensuring it is in good working order
- Ensuring it is used or worn by the worker, so far as is reasonably practicable workers must:
  - Follow all instructions to wear and use PPE as per the manufacturer’s specification
  - Take reasonable care of PPE
  - Assess the task and ensure that the correct PPE is being used

The proposed and usage of PPE but not limited the ones below are:
<table>
<thead>
<tr>
<th>Equipment and items</th>
<th>Equipment</th>
<th>Area of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety harnesses</td>
<td></td>
<td>For those working at heights</td>
</tr>
<tr>
<td>Ear muffs</td>
<td></td>
<td>For those working in noisy compounds.</td>
</tr>
<tr>
<td>Gloves</td>
<td></td>
<td>Handling of toxic materials and cement/concrete mixing and doing metal work</td>
</tr>
<tr>
<td>Helmets</td>
<td></td>
<td>Within site especially where there is loading and offloading of materials and at the construction premises and those working at heights.</td>
</tr>
<tr>
<td>Dust masks</td>
<td></td>
<td>Areas with dust generation such as concrete mixing zones.</td>
</tr>
<tr>
<td>Overalls</td>
<td></td>
<td>All construction personnel.</td>
</tr>
<tr>
<td>Safety boots/Shoes</td>
<td></td>
<td>All workers at site.</td>
</tr>
<tr>
<td>Eye goggles</td>
<td></td>
<td>Where there are activities such as welding or spraying or eminent risk of eye contamination or injury.</td>
</tr>
</tbody>
</table>
13. Managing Construction Hazards Specified in Regulations

13.1. Falls from Height

CEC will manage the risks associated with falls from heights by:

- Ensuring that where practicable, any work involving the risk of a fall is under taken on the ground or on a solid construction (such as an elevated work platform).
- Where this is not practicable, provide a fall prevention device such as secure fencing, edge protection, working plat forms and/or covers.
- Where this is not practicable, provide a work positioning system such as plant or a structure (other than a temporary work platform) that enables a person to be positioned and safely supported.
- Where this is not practicable, provide a fall arrest system such as a safety harness system.
- Workers will be trained in emergency procedures for fall arrest systems.
- Apply a fall restraint where a harness and lanyard restrict personnel from a fall zone.
- Consider the fall zone and possible “pendulum effect”.
- When undertaking work involving the risk of a fall from height, workers must:
  - Follow all instructions.
  - Work with a buddy when using a ladder.
  - Only use approved work platforms.
  - Assess climate (wind, rain, dust, sufficient light etc.).
  - Assess the surface that requires access, (corrosion, stability, gradient, slip possibility/grip etc.).
  - Assess that the equipment being used is suitable for the task and fit for use. Inspection tags on harnesses and any fall prevention equipment to be current.
  - Check that a suitable anchor point is available and can withstand the force of a fall.
  - Static lines are to be rated, inspected and in good condition.
  - Have a rescue plan.

13.2. Falling Objects

Where practical, CEC will manage risks associated with falling objects. This will in clued requiring using control measures such as barriers, toe-boards and by storing and stacking materials safely.

Where this is not possible, a risk assessment must be undertaken and appropriate control
measures implemented to manage the risk of injuries from falling objects.

13.3. Excavation Work and Trenching

No excavation work will be permitted to start unless they have:

- Obtained an excavation permit
- Investigated any underground services that may be affected by their works, before starting work
- Implemented control measures to avoid director in advertent contact with underground services pot-hole dug (by hand) to expose existing services before any mechanical excavation near the services
- Consider ground stability

13.4. Working near Overhead or Underground Essential Services

CEC will manage the risks associated with working in the vicinity of an overhead or underground power line.

If maintaining a safe distance is not reasonably practical, it will be required to:

- Assess the risk associated with the proposed work
- Implement control measures consistent with the risk assessment
- Contact and consult with the local essential services provider.

For excavation work near underground essential service

CEC will:

- Take all reasonable steps to obtain current underground essential services information before directing or allowing the excavation work to start
- Provide this information to any person engaged to carry out the excavation work
- Consider this information when carrying out, directing, or allowing the carrying out of the excavation work
- Ensure this information is available for inspection.

CEC will comply with the following rules:

a) For work near overhead power lines up to and including 110kV:
o Work is not permitted within 4meters of overhead power lines
o The Person in charge of the work must have written authority-Permit to work from EDCL to work within the “nogo”(exclusion)zone
o A safety watcher shall be used if using plan to equipment in the vicinity of overhead power lines.

b) For work near overhead power lines of greater than110kV:

o Work is not permitted within 8meters of overhead power lines
o The person in charge of the work must have written authority- Permit To Work from EDCL to work within the “no-go” (exclusion) zone
o Safety watcher shall be used if using plant or equipment in the vicinity of HV overhead power lines.

13.5. Electrical

Power supplied to the site must only come from:

o An electricity distributer main
o An existing witch board permanently installed at the premises
o A compliant low voltage generator
o A compliant inverter. (to be approved by The Principal Contract or management)

Switchboards and distribution boards used onsite must:

o Be of robust construction and materials capable of withstanding damage from the weather and other environmental and site influences
o Be securely attached to a post, pole, wall or other structure unless it is of a stable free standing design able to withstand external forces likely to be present.

o Incorporate suitable support and protection for flexible cords and cables and prevent mechanical strain to the cable connections inside the board
o Protect all live parts at all times
o Be individually distinguished by numbers, letters or a combination of both (where multiple boards are present).

o Flexible cords used on construction sites must be rated heavy duty.
o To avoid confusion with individual earthing conductors, green sheathed flexible power cords must not be used on site.

o Flexible cords must be either protected by a suitable enclosure or barrier (flexible or rigid conduit) or located where they are not subjected to mechanical damage,
damage by liquids or high temperature (e.g. Leads must be elevated on stands or hung from non-conductive support brackets).

- The Principal Contractor and its contractors will main Tainan in-service inspection and test regime for all portable electrical leads, tools and earth leakage devices.
- The Principal Contractor will verify that after the equipment has been inspected and tested, it will be fitted with a durable, non-reusable, non-metallic tag. The tag will include the name of the person or company who performed the test and the test and re-test date.
- Records of all inspections, tests, repairs and faults related to all electrical equipment will be recorded in a “testing and tagging” register.
- Electrical equipment used in hostile environments should be inspected more frequently.
- Workers must report any damaged electrical equipment to the principal contractor. It will be removed from service and either repaired or replaced and subsequently inspected and tested as required.
- New electrical equipment must be recorded in the register and subjected to the in-service testing regime within the first 3 months of service.

13.6. Plant and Equipment

CEC will manage the risks associated with working on the project including in relation to all plant and equipment used on site. Such plant and equipment must comply with the requirements of the HS Regulations and codes of practices.

The requirements are that:

- Plant and equipment is used only for the purpose for which it was designed
- All health and safety features and warning devices on plant are used
- All information, training and instruction provided must be followed
- Guarding must be permanently fixed and is not permitted to be removed
- No person other than the operator may ride on the plant unless the person is provided with a level of protection that is equivalent to that provided to the operator
- Maintenance/servicing and testing is carried out and logged
- Check equipment is “fit for use“ each shift

Further requirements are that:

- All plant is regularly maintained, inspected and tested by a relevant competent
ensuring that:

- The plant has a warning device that will warn persons who may be at risk from the movement of the plant
- All plant that lifts or suspends loads is specifically designed to lift or suspend that load.
- All safeguards are in place and operational. (E.g. Fire extinguishers, flashing lights etc.)
- The plant operator is ticketed or holds competencies in the use of the equipment
- Site vehicles and trucks are well maintained, road worthy and that personnel are licensed to operate.

### 13.7. Scaffolds

CEC will manage the risks associated with working on the project including scaffolding by ensuring that:

- The scaffold is erected by a competent person (having regard for high risk competency ticket for structure above 4 meters)
- Before the use of a scaffold, the competent person has advised (in writing) that the structure is safe. A “scafftag” will be required to be filled out and attached to the structure.
- Scaffolding is inspected by a competent person:
- Before use of the scaffold is resumed after an incident occurs that may reasonably be expected to affect the stability of the scaffold
- Before use of the scaffold is resumed after repairs
- If an inspection indicates that any scaffold or its supporting structure creates a risk to health or safety
- Any necessary repairs, alterations and additions will be made or carried out
- The scaffold and its supporting structure will be inspected again by a competent person before use of the scaffold is resumed.
- There is no authorized access to the scaffolding including by removing ladders where there is no site fencing and barricade and danger flag the access point to the scaffold.

Workers must:
HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

- Not use incomplete scaffolding
- Report any scaffolding issues to the principal contractor
- Comply with the directions of any tags attached to the scaffold
- Report any damage or incorrect fixed components on the structure
14. Managing other Construction Hazards

14.1. Ladder Safety

CEC will manage hazards associated with ladders by ensuring that:

- Ladders are used according to the manufacturer’s instructions
- Only one person at a time using a ladder
- Work is performed from a platform ladder opposed to a step ladder
- Ladders on scaffolds or elevated work platforms are not used to gain extra height
- Ladders are fit for purpose e.g. Fiberglass ladders shall be used where there is a risk of live rails adjacent or overhead wires, where isolation is not possible.
- Risk assessment of the task with the view of maintaining three points of contact
- An alternative access appliance is used where repetitive work is required at height

14.2. Manual Handling

CEC and its engaged contractors will manage hazards associated with manual handling. The requirements are that:

- All users follow good manual handling practices
- Risk assessment of loads or tasks occurs
- Mechanical lifting aids are used where applicable
- Appropriate PPE is provided to workers

14.3. Slips, trips and fall

CEC will manage hazards associated with slips, trips and falls by ensuring that:

- Slips, trips and falls check list are used as required
- Visual checks are conducted for hazards that could cause someone to slip, trip or fall
- Workers keep the site tidy as part of the written site rules
- Regular audits on work areas are conducted pre-start meetings cover the importance of housekeeping and engagement of personnel to be proactive in the rectification of any hazards identified in work areas
- Protecting openings or voids created or discovered during works, eliminating the chance of fall injury.

14.4. Hand Operated and Power Tool Use

CEC will manage hazards of hand operated and power tools. The management will require that:
15. Audits

- Tools are regularly checked to ensure they are in a safe working order
- All electrical tools are recorded in a test and tag register
- Electrical tools are tested and tagged regularly
- Any issues identified with power tools are communicated to workers through a tool box meeting.

Before using power tools, workers must ensure:
- Electrical connections are secure
- Electricity supply is through a residual current device
- Safety guards are in position
- The machine is switched off before activating the electricity supply
- Appropriate PPE is used as required by manufacturer’s guide lines or as guided by the principal contractor
- The tool is being used for the purpose for which it is designed
- The operator is competent in its use
- The tool is not restricted on site (eg: grinders or explosive power tools)

Workers must report any issues with power tools to CEC. Unsafe tools will be tagged out of service and removed from the work area

14.5. Site Traffic Movements and Mobile Plant

CEC will manage risks associated with traffic management in relation to the project. The management requires that:
- All vehicles on site are to be road worthy
- Drivers and operators to be licensed for the vehicle or machine being operated
- Speed limits are sign posted across the site and adhered to
- Alternate traffic routes to perform project activities will be set out on a Traffic Management Plan, informing all relevant personnel on site inclusive of security.
- Sign posting of traffic directions, stop and give way etc.
- Delineation, safety Krebs, beams and barriers as required
- All vehicles should have valid vehicle inspection certificate and insurance

15. Audits and Inspections

The goal of undertaking Audits and Inspections on the Project is to recognize positive behaviors and work practices, identifying areas in need of improvement and assessing how tasks are
being undertaken as well as the environment in which they are being performed.
The interactive presence with site personnel and the information captured helps assist with creating a safe working culture.

15.1. Walk, Observe and Communicate

A WOC is a structured program of work place observations to initiate discussions based on specific or general issues.
The purpose of WOC is to:

- Coach, motivate and facilitate positive behaviors and approaches to work.
- Identify and correct issues and hazards in the work area including unsafe acts and conditions.
- Prevent injury, damage and lost production by developing a culture of commitment to resolving their underlying causes in the workplace.
- Reinforce and raise standards ‘the standard we achieve is the standard we walk past’.
- Eliminate injuries, damage and waste.

WOC sessions are not policing exercises. Their success is based on open and honest discussion of the issues. The focus must be on identifying causes not attributing blame.

Where continued non-compliance is observed disciplinary action must be implemented in accordance with Site policy, but separate from the WOC process.

Management shall undertake WOC’s on their work are as to ensure the above mentioned purposes are conducted.

Completed WOC’s shall be forwarded to the HS Manager for review and record management.

15.2. Weekly Safety Inspections

In order to ensure the safety and welfare of personnel on site, Weekly Safety Inspections shall be undertaken and documented by area Supervisors. The inspections shall be carried out to identify:

- Potential hazards in the work area
- Unexpected risks due to working in proximity with other services/businesses/activities
- Deficiencies with plant or equipment
- Areas of improvement in the working environment or process implementation

All actions raised during the inspection shall be documented and tracked in the Corrective Action Plan until completion.
15.3. Targeted Inspections

In addition to the Weekly Safety Inspections, specific Targeted Inspections shall be undertaken on the Project. Targeted Inspections include the following:

- Office and Amenities
- First Aid and Facilities
- Housekeeping, Access and Egress
- Fall Prevention
- Lifting Equipment
- Cranes
- Scaffolding
- Electrical Equipment
- Mobile Plant
- Employee Conduct
- Permit to Work
- Hazardous Substances
- Welding/Hot Work
- Excavations
- Confined Space Entry
- Electrical Isolations
- Driving Safety
- Earth moving Activities

All actions raised during the inspection shall be documented and tracked until completion.
16. Safe Work Method Statements and Job Health and Safety Analysis

All high risk activities to be carried out on site will require a SWMS and a JHSA to be prepared and a copy provided to EDCL Project Leader for review and acceptance prior to any work commencing.

The EDCL Project management team will review the method statement and the risk assessment to ensure that CEC has thought about and planned the process of carrying out the task in the safest possible manner.

Once the SWMS and JHSA have been accepted, CEC shall be issued with a project Work Permit that allows the specific work activity detailed within the Work Permit to commence. All personnel undertaking the activity must sign on to the Work Permit at the commencement of each shift, and sign out at the end of the shift.

CEC carrying out works must continually review the works and through consultation with work crew/s update any new tasks, hazards or risks that develop on their SWMS and JHSA.
17. Issue Resolution

Issue management is the process of identifying and resolving issues. Problems with staff, or suppliers, technical failures, material shortages—these all might have a negative impact on the project. If the issues go unresolved, the project risks creating unnecessary conflicts, delays or even failure to produce the deliverables.

The timeframe for resolution and the resources allocated to resolve an H&S issue will be proportionate to the likelihood and seriousness of the potential consequences of the H&S hazard/risk associated with the issue.

Personnel who identify an H&S issue must report it immediately to their immediate supervisor and the supervisor and workers must work together, in conjunction with other people affected by the issue, to identify a solution.

18. Condom provision

As one of the responsibilities of the contractor’s OHS Officer, condoms shall be provided on site and placed at a well designated place accessible by all workers including toilets. On a weekly basis, the OHS officer will check and ensure that condoms are available all the time.

19. Filling and management of HS documents

CEC plans to file and manage all documents related to HS during the period of project implementation by safe and appropriate manner and include by not limited to REG Occupational Health and Safety Policy, IFC Guidelines on Health and Safety and the ESIA for EPC West developed by EDCL.
**ANNEXES**

**Annex 1: Incident report template**

<table>
<thead>
<tr>
<th>HS Report</th>
<th>INITIAL HS INCIDENT REPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date Reported</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Division</td>
<td></td>
</tr>
<tr>
<td>Region</td>
<td></td>
</tr>
<tr>
<td>Office / Sub Location</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Classification</td>
<td>(select one)</td>
</tr>
<tr>
<td></td>
<td>□ Drill or Inspection</td>
</tr>
<tr>
<td></td>
<td>□ Environmental Incident</td>
</tr>
<tr>
<td></td>
<td>□ External Event</td>
</tr>
<tr>
<td></td>
<td>□ Hazard</td>
</tr>
<tr>
<td></td>
<td>□ I &amp; I – First Aid</td>
</tr>
<tr>
<td></td>
<td>□ I &amp; I – Lost Time</td>
</tr>
<tr>
<td></td>
<td>□ I &amp; I – Medical Treatment</td>
</tr>
<tr>
<td>Activity at time of incident</td>
<td>(select one)</td>
</tr>
<tr>
<td></td>
<td>□ External Event</td>
</tr>
<tr>
<td></td>
<td>□ Office Base related</td>
</tr>
<tr>
<td></td>
<td>□ Project Site related</td>
</tr>
<tr>
<td></td>
<td>□ Travel Related</td>
</tr>
<tr>
<td></td>
<td>□ Not applicable</td>
</tr>
</tbody>
</table>

**Event Details**

<table>
<thead>
<tr>
<th>Date of Event</th>
<th>Time of Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number (if applicable)</td>
<td></td>
</tr>
<tr>
<td>Total time away from work due to injury</td>
<td></td>
</tr>
<tr>
<td>*Method of recording would be in hour and half hour intervals i.e. 7, 7.5, 24 etc.</td>
<td></td>
</tr>
</tbody>
</table>

Person Reporting Incident

| □ Provide this person permission to view/modify this item | |

Describe event in your own words:

Exact Location of the Event
### HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)

<table>
<thead>
<tr>
<th>e.g. third floor corridor near lunch room</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the location of the event a CEC-controlled office or facility?</td>
<td>○ Yes ○ N/A ○ No</td>
</tr>
<tr>
<td>Does this incident need to be reported to the Client/ Principal Contractor of the respective project where the incident occurred?</td>
<td>○ Yes ○ N/A ○ No</td>
</tr>
</tbody>
</table>

**Immediate Response by Personnel on Site:**

### Injury Details (Fill out this section if the incident involves an injury)

<table>
<thead>
<tr>
<th>Injured Person Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Injured Person is (select one)</td>
<td></td>
</tr>
<tr>
<td>□ CEC employee</td>
<td>□ Contractor to CEC</td>
</tr>
<tr>
<td>□ Subcontractor/Sub consultant to CEC</td>
<td>□ Visitor to CEC site</td>
</tr>
<tr>
<td>□ Member of the public</td>
<td>□ Other</td>
</tr>
</tbody>
</table>

| Home Address |       |
| Witness |       |
| Witness Contact Details |       |

| Nature of Injury (select one) |       |
| Amputation | Electric shock |
| Asthma or other respiratory illness | Effects of exposure to the elements |
| Biological illness or Blood born pathogen | Fracture |
| Bruise, contusion or crushing injury | Internal injury |
| Burn | Poisoning or effects of substances |
| Concussion | Psychological |
| Cuts/Foreign body penetration | Sensory loss |
| Dermatitis or other skin condition | Spray/Strain |
| Dislocation | Superficial injury |

| Body Part affected (select one) |       |
| Ear | Trunk |
| Eye | Back |
| Face | Internal organs |
| Head | Hip or leg |
| Neck | Feet or toes |
| Shoulder or arm | Multiple locations |
| Hand or fingers | Not applicable |

| Cause of Injury (select one) |       |
| Bite or sting | Muscular stress |
| Contact with object | Physical/mental abuse |
| Struck by object | Trapped between |
**HSMP for the Construction of Medium Voltage Lines in Rutsiro and Karongi Districts: Reviewed and approved by SABA Engineering (RESSP Supervising firm)**

<table>
<thead>
<tr>
<th>Description of Treatment:</th>
<th>□ Exposure to element/substance</th>
<th>□ Trapped by</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>□ Fall from height</td>
<td>□ Vehicle accident</td>
</tr>
<tr>
<td></td>
<td>□ Fall at same level</td>
<td>□ Not otherwise specified</td>
</tr>
</tbody>
</table>

| First aid administered by | □ Returned to work | □ Went home | □ Transported to medical centre |

| After treatment the injured person (select one) | □ Returned to work | □ Went home | □ Transported to medical centre |

| First full day or shift that injured person missed | □ Returned to work | □ Went home | □ Transported to medical centre |

| Injured person returned to work on | □ Returned to permanent duties |

| Injured person returned to permanent duties | □ Yes | □ No | □ Unsure |

| Will a compensation claim be lodged? (select one) | □ Yes | □ No | □ Unsure |

| Add additional details if necessary | | | |

---
**Annex 2: Take 5 Checklist**

**TAKE 5 SAFETY CHECKLIST**

This checklist will help workers and contractors who are working on new or external worksites reduce their exposure to health and safety risks and hazards. It should take 5 minutes to complete.

<table>
<thead>
<tr>
<th>Company Name:</th>
<th>CEC Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Time:</td>
<td></td>
</tr>
<tr>
<td>Specific Location:</td>
<td></td>
</tr>
<tr>
<td>Supervisor/Team Leader:</td>
<td></td>
</tr>
<tr>
<td>Task:</td>
<td></td>
</tr>
<tr>
<td>Attendees</td>
<td></td>
</tr>
</tbody>
</table>

**Before starting work:**

1. Have you received induction training? [Yes ☐ No ☐ N/A ☐]
2. Do you know the company’s health & safety rules? [Yes ☐ No ☐ N/A ☐]
3. Are you familiar with how to report hazards & incidents? [Yes ☐ No ☐ N/A ☐]
4. Are there emergency facilities and an evacuation procedure/route for the site? [Yes ☐ No ☐ N/A ☐]
5. Do you have access to appropriate emergency and first aid equipment? [Yes ☐ No ☐ N/A ☐]
6. Have you asked the person in charge about all relevant hazards? [Yes ☐ No ☐ N/A ☐]
7. If the work involves a high risk task (such as work at heights, hot-work, confined spaces), is a work permit/safe work required? [Yes ☐ No ☐ N/A ☐]
8. Do you have the correct procedures and equipment to do the work safely? [Yes ☐ No ☐ N/A ☐]
9. Is there appropriate separation of vehicles and people during the proposed work? [Yes ☐ No ☐ N/A ☐]
10. Is all required electrical/mechanical equipment in a safe condition? [Yes ☐ No ☐ N/A ☐]
11. Are hazardous/dangerous substances used and stored according to their safety data sheets? [Yes ☐ No ☐ N/A ☐]
12. Have you consulted with workers about the task and the safe way to do it? [Yes ☐ No ☐ N/A ☐]
13. Do you have all necessary PPE? [Yes ☐ No ☐ N/A ☐]
14. Have you got a safe way of getting in and out of your work area? [Yes ☐ No ☐ N/A ☐]
15. Have any manual handling risks been identified and accessed? [Yes ☐ No ☐ N/A ☐]

*If you answer "no" to any of those above, you may need to follow up with the person in charge before you start work to help ensure your safety.*

**At the end of work:**

1. Have you left the worksite in an appropriate condition free from hazards and risks (clean-up, tools put way, housekeeping)? [Yes ☒ No ☒ N/A ☐]

*Return this checklist along with your job task sheet to your manager/supervisor after work is complete or at the end of your shift.*

**Authorized by: …………………… Title …………………… Date: ……/……./………**
Annex 3: List of Content for a basic First Aid Kit

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Individual</th>
<th>Small</th>
<th>Medium</th>
<th>Big</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative material</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>List of first aid materials</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Note book</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Pins</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hygiene, disinfection and protection materials</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Scissors</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Sterile gloves</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>Non sterile gloves</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Antiseptic solution</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Sterile gauzes</td>
<td>4</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Sterile bandages</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Adhesive bandage/pack</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Dressing ready for use/Elastoplast</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Burn dressings</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Bandage</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Bandage material for bandage and immobilisation</td>
<td>100</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Gauze bandages</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Elastic bandages</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Elastic bandages</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Elastic bandages</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Triangular bandages</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Dressing</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Antiseptic-antipyretic (paracetamol)</td>
<td>100</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Instruments</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Scissors</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Thermometer</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>RG Surgical blades</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Perforated blades</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>