



**ELECTRICITY ACCESS ROLLOUT PROGRAMME (EARP)**

**Rwanda Electricity Sector Strengthening Project (RESSP)**

**ENVIRONMENTAL HEALTH AND SAFETY PLAN (EHSP) FOR PLANT DESIGN,SUPPLY AND INSTALLATION OF MV & LV LINES CONSTRUCTION AND SERVICE CONNECTIONS FOR ELECTRIFICATION OF RULINDO, BURERA AND RUBAVU DISTRICT, NORTH-WESTERN AREAS OF RWANDA (refer to the Contract No 11.07.023/6325/17/EDCL-MD/YN/cm)**

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## EXECUTIVE SUMMARY

The Government of Rwanda received funds from the World Bank, to finance the construction of approximately **139** km of Medium Voltage (MV) and **218** km of Low Voltage (LV) and expected to connect almost **14,305** households. The Sub-project is implemented through the Rwanda Electricity Sector Strengthening Project (RESSP) under the Electricity Access Rollout Program (EARP) and the Energy Development Corporation Limited (EDCL), a subsidiary of Rwanda Energy Group (REG).

Under the process of implementing the project, Lucky Exports is contracted for the design, procurement and installation of MV and LV lines and service connections as described above and herewith acknowledges its corporate responsibilities towards the protection of employees, interested parties, and members of the public from Occupational Health and Safety Risks arising from his daily business activities, and shall also acknowledge its corporate responsibilities towards the protection of environment, and accordingly, is committed to the elimination, reduction and control of potential negative environmental impacts.

Therefore, this Environmental Health and Safety (EHS) Plan is a comprehensive system of policies, procedures, and standards that has been developed specifically for the electrification project in North-western area of Rwanda (Rulindo, Burera and Rubavu Districts) to manage EHS hazards and risks related to its development and to provide systems to enable continuous improvements throughout the life-cycle of the project. The aim of this EHS plan is to provide procedures, strategies and standards for ensuring and verifying that all necessary statutory requirements are complied with and that operations are carried out to minimize all kinds of occupational, health and safety risks and hazards and while enabling a friendly working environment.

The present EHS management Plan will have three general objectives for: prevention of incidents or accidents that might result from abnormal operating conditions on the one hand and reduction of adverse effects that result from normal operating conditions and provides the proper measures for waste handling, storage, transportation and disposal during the construction and Operation Phases of the projects

shall implement an EHS training program for all employees (including all site technicians, managers and supervisors), subcontractors and other project stakeholders (including visitors and guests as required).

The Contractor is committed to leading daily business safely under the highest environmental, health and safety performance standards in a style that respects the environment, culture and customs of the communities within the area of direct influence of the project. In accordance with prescribed EHS policies, the contractor is committed to the identification, mitigation and communication of all potential EHS related hazards, such that risk to its personnel and other stakeholders is kept as less as reasonably practicable. The implementation of identified control measures, reducing risk to acceptable levels, start with effective communication.

In conjunction with an output from the hazard identification and risk assessment process, the EHS Manager will be guided and implement an internal emergency response and recovery plan (IERP) and the same will be supplemented by safety rules at site, daily briefings, records and commitments from the safety committees that will be established directly on the first day of site operations. Prior to the commencement of project or individual activity, it is required to understand the nature of the tasks involved and any hazards that may be associated with, in order to ensure that all potential hazards and risks are identified and suitably controlled or mitigated anticipatively. The Plan shall be reviewed periodically to assess its ongoing effectiveness, adequacy and suitability and new change management required according to the time work conditions.

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## LIST OF ABBREVIATIONS

<b>EA</b>	: Environmental Assessment
<b>EARP</b>	: Electricity Access Rollout Program
<b>EDCL</b>	: Energy Development Corporation Limited
<b>EHSP</b>	: Environmental Health and Safety Plan
<b>ESHS</b>	: Environmental, Social, Health and Safety
<b>ESIA</b>	: Environmental and Social Impact Assessment
<b>EHS</b>	: Health and Safety Environment
<b>EUCL</b>	: Energy Utility Corporation Limited
<b>GoR</b>	: Government of Rwanda
<b>EHSMS</b>	: Environmental, Health, Safety Management System
<b>IFC</b>	: International Finance Corporation
<b>MININFRA</b>	: Ministry of Infrastructure
<b>OHS/A</b>	: Occupational Health and Safety/Administration
<b>OPs</b>	: Operational Policies
<b>PM</b>	: Project Manager
<b>PPE</b>	: Personal Protective Equipment
<b>PS</b>	: Performance Standard
<b>RESSP</b>	: Rwanda Electricity Sector Strengthening Project
<b>RDB</b>	: Rwanda Development Board
<b>REMA</b>	: Rwanda Environment Management Authority
<b>REG</b>	: Rwanda Energy Group
<b>SE</b>	: Supervisor Engineer
<b>SO/SM</b>	: Safety Officer/Safety Manager
<b>WB</b>	: World Bank
<b>WMP</b>	: Waste Management Plan



## **1. INTRODUCTION**

For all construction sites, the working processes are particularly complex, due to various kinds of work, there are risks, whose nature differs from one to another. In order to avoid their consequences and, therefore, in order to prevent them, it is necessary to know the risks and levels of significance. It is particularly necessary that all persons involved in works from various vendors, Owner and visitors, are well aware of the risks they are exposed to, what effects the risks may have on them and what can be done to alleviate these risks.

This Environmental Health and Safety Plan as a comprehensive system of policies, procedures, and standards that has been developed specifically for the electrification project in the Northern area of Rwanda, especially Rulindo, Burera and Rubavu Districts. It involves the charter to manage Environmental Health and Safety hazards and risks related to its development within the framework of Health, Safety and Environmental Management System and to provide systems to enable continuous improvements throughout the project lifecycle.

### **1.1. Purpose and Objective**

The purpose of this plan is to establish, during construction period of the works of a project undertaken by the contractor – Lucky Sports, the procedures for health and safety measures which shall be adopted in order to minimize risks, prevent accidents and occupational illnesses.

This will be done in accordance with the contractor own contractual requirements, the laws of the country, the Owners requirements contractual obligations and with the organization systems and work procedures.

## **1.2. Plan Objectives**

The objectives of this plan is to provide strategies and standards for ensuring and verifying that all necessary legal requirements are complied with and that activities are carried out with minimized, avoided risks and accidents and or occupational damages.

The objectives of this Project specific Environmental, Health and Safety Plan 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.

### 1.3. Project Location and scope

The current project is located in Northern area of Rwanda, specifically in Rulindo, Burera and Rubavu Districts. The following table summarises the detailed list sectors to be covered for each district:

#### a) Project Location

The project location is presented by the following table:

**Table 1: Project location and scope by districts and sectors**

District	Sector	cells
Rubavu District	Nyamyumba	Kinigi
		Burushya
		Nyamiko
		Busoro
		Munanira
		Kiraga
	Kanama	Misabike
		Rusongati
		Kamuhiza
		Yungwe
		Karambo
		Nkomane
	Nyundo	Nyundo
		Mukondo
		Kavumu
		Gatovu
		Bahimba
		Kigarama

	<b>Rugerero</b>	Rushubi
		Kabirizi
		Gisa
	<b>Nyakiriba</b>	Kanyefurwe
<b>Burera District</b>	<b>Nemba</b>	Nyamugali
		Kivumu
		Rubona
		Rushara
	<b>Rugengabari</b>	Nyanamo
		Rukandabyuma
	<b>Ruhunde</b>	Gaseke
		Gitovu
	<b>Cyeru</b>	Ndongozi
		Kabutare
	<b>Rwerere</b>	Ruconsho
		Rugali
	<b>Rugarama</b>	Cyahi
		Karangara
	<b>Cyanika</b>	Gasiza
	<b>Kagogo</b>	Kayenzi
		Kiringa
<b>Rulindo District</b>	<b>Base</b>	Rwamahwa
	<b>Cyungo</b>	Rwiri
<b>Total</b>	<b>15</b>	<b>41</b>

**b) Project Scope (km)**

The Government of Rwanda received funds from the World Bank, to finance the construction of approximately **128.65km** of Medium Voltage (MV) and **225.4km** of Low Voltage (LV).

No	DISTRICT	SECTORS	SCOPE
1	<b>RULINDO</b>	Base	<b>58.982 km of MV</b>
		Cyungo	
2	<b>BURERA</b>	Cyeru	
		Nemba	
		Rugendabari	
		Ruhunde	
		Rwerere	
		Cyanika	<b>13.815 km of MV</b>
		Rugarama	
		Kagogo	
3	<b>RUBAVU</b>	Kanama	<b>55.824km of MV</b>
		Nyamyumba	
		Rugerero	
		Nyakiriba	
		Nyundo	
	<b>Total</b>	<b>15 Sectors</b>	<b>128,65 Km (Together with 225.4 km of LV)</b>

#### **1.4. Scope of planned works per stages**

The scope of Works for this contract includes design, supply, transportation to site, installation, testing and commissioning of a distribution network in the Northern area of Rwanda and works are distributed in three (3) different lots as described in the table above.

#### **1.5. Planned activities under this project**

The overall scope of works under this project includes:

1. Route survey and profiling for Medium and Low Voltage distribution lines. This includes preparation of pole schedules, line route profiles, and cadastral survey plans to a scale of 1:2500, complete with location plans drawings prepared on maps with a scale of 1:50,000 in AutoCAD as well as Arch GIS software.
2. Checking of the system stability on all MV poles using the latest version PLS-CADD software and will submission the designs for approval (before procurement of poles) including: back file, Sheet view in drawing format ,Structures location and usage report, Section usage report, Sag-Tension report as well as Line summary report.
3. Confirmation of guaranteed Technical Data Sheets, material specifications and vendor drawings, procurement of poles, conductor, fittings, transformers, service cables and fittings required in order to establish the distribution system as specified.
4. Carry out manufacturing, pre-shipment inspections in accordance with approved Inspections & Testing Plan, perform sea worthy packing, shipment, clearing and forwarding at the port of destination, inland transportation and delivery to site of all materials and equipment required for the specified distribution system.
5. Carry out site preparation, pegging for the lines in accordance with the approved line design, excavation of foundations, and installation of poles and backfilling for the same in accordance with the technical specifications.
6. Carry out pole dressing, by installing all the fittings in accordance with the approved line design, and do stringing for the line in accordance with the approved sag and tension chart specific to the type of conductor used.

7. Carry out installation of transformers stations including distribution transformers, medium and low voltage protection devices, interconnecting wiring to the medium and low voltage networks, earthing systems, disconnections and other network equipment as specified.
8. Carry out installation of all cables as required under the scope of supply. This includes LV cables, service cables and take-off cables from substations or hydro stations to medium voltage lines.
9. Carry Out pre-commissioning tests and commission the completed distribution network in accordance with the specifications.
10. Carry out Operations & Maintenance Training for Employer's personnel as specified.
11. Prepare and Submit Operations & Maintenance Manuals as well as As-Built Documentation for the works. The documentation is to be submitted in Portable Document Format, AutoCAD as well as Arch GIS formats.
12. Remedy any defects occurring during the course of the Defects Liability Period (DLP) in accordance with the Contract.

## 1.6. Definitions

**Table 2: Some definitions**

<b>Term</b>	<b>Description</b>
<b>Direct aspects</b>	Direct aspects are those caused as a direct result of the organization's operations.
<b>Environment</b>	Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation.
<b>Environmental aspect</b>	Element of an organization's activities, products or services that can interact with the environment (example: emissions to air, releases to water, disposal of waste, use of energy, etc).
<b>Environmental Impact</b>	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services. (example: contamination of water, soil etc)
<b>Environmental Health and Safety Plan</b>	Part of an organization's management system used to develop and implement its environmental Health and Safety policy and manage its in-

	teraction(s) with the environment
<b>Hazard</b>	The potential to cause ecological harm, including mortality, injury, illness, damage to property or physical environment, or other related costs.
<b>Health</b>	The state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity.
<b>Indirect aspects</b>	Indirect aspects are those over which the organization has influence, but not direct control.
<b>Safety</b>	The state of being “safe” or the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other consequences of failure, damage, accidents, harm etc.
<b>Significance</b>	An assessment as to whether an environmental aspect or impact warrants attention. Factors considered in assessing significance may include: legal compliance, impact magnitude and duration, and repercussions for business issues such production continuity, public image, and insurance costs.



## **CHAP 2: POLICY, LEGAL AND ADMINISTRATIVE FRAMEWORK**

### **2.1. Constitution of the Republic of Rwanda**

In consideration of the Constitution of the Republic of Rwanda of June 4, 2003 as amended to date, article 49 states that every citizen is entitled to a healthy and satisfying environment. Every person has the duty to protect, safeguard and promote the environment. The state shall protect the environment. The law determines the modalities for protecting, safeguarding and promoting the environment.

### **2.2. Rwanda Vision 2020**

The vision 2020 of Rwanda gives strategic actions and inter alia institutes the principle of precaution to mitigate the negative effects caused to the environment by the socio-economic activities, to institute the “polluter pays” principle as well as preventive and penal measures to ensure the safeguard of the environment and to require the environmental impact study of any development project.

### **2.3. National Environmental Policy (NEP).**

The overall objective of the Environmental Policy is the improvement of man’s wellbeing, the judicious utilization of natural resources and the protection and rational management of ecosystems for a sustainable and fair development.

The Policy seeks to achieve this through the following objectives:

1. To improve the health and the quality of life for every citizen and promote sustainable socio-economic development through a rational management and utilization of resources and environment;
2. To integrate environmental aspects into all the development policies, planning and in all activities carried out at the national, provincial and local level, with the full participation of the population;
3. To conserve, preserve and restore ecosystems and maintain ecological and systems functioning, which are life supports, particularly the conservation of national biological diversity;

4. Optimum utilization of resources and attain a sustainable level of consumption of resources;
5. To create awareness among the public to understand and appreciate the relationship between environment and development;
6. To ensure the participation of individuals and the community in the activities for the improvement of environment with special attention to women and the youth and
7. To ensure the meeting of the basic needs of today's population and those of future generations.

### **2.3. National Environmental Law**

The Organic Law n° 04/2005 of 08/04/2005 determining modalities of protection, conservation and promotion of environment in Rwanda regulates the Environmental impact Assessments. In its article 67: Every project shall be subjected to environmental impact assessment, before obtaining authorization for its implementation. This applies to program and policies that may affect the environment. Article 68 specifies the main points that an Environmental Impact Assessment must include. Article 69 stipulates that the environmental impact assessment shall be examined and approved by the Rwanda Environmental Management Authority or any other person given a written authorization by the Authority.

The environment impact assessment shall be carried out at the expense of the promoter. Article 70 states that an order of the Minister having environment in his attributions establishes the list of projects for which the public administration shall not warrant any authorization without an Environmental Impact Assessment describing direct and indirect consequences of the project to the environment.

#### **2.3.1. Law N° 18/2007 of 19/04/2007 relating to expropriation in the public interest**

The law defines the activities or projects that can be classified as public interest and process and requirements for expropriation activities as well as the cost for goods and other infrastructure to be expropriated. The law provides a window for appeal for somebody who is not satisfied by the cost of compensation.

### **2.3.2. Environmental Impact Assessment Regulations, 2006**

REMA has now developed the EIA regulations which provide a guide and requirements for EIA in Rwanda. According to these new regulations, Article 1 makes it mandatory for all the projects listed under schedule I to be subjected to a full-scale EIA.

The Article further states that no environmental authorization shall be granted by the Authority for any project in Schedule I to these Regulations if no environmental impact assessment has been submitted to the Authority in accordance with the provisions of these Regulations. The Article states that any project listed under Impact Level III of Schedule I to these Regulations shall require a full environmental impact assessment by preparation of an environmental impact report, unless the Authority refuses permission.

### **2.3.3. Ministerial order N° 003/2008 of 15/08/2008 relating to the requirements and procedure for Environmental Impact Assessment**

Article 1 stipulates that Environmental Impact study is a systematic way of identifying environmental, social and economic impacts of a project before a decision of its acceptance is made. In article 3, the developer submits an official application which includes a project brief of the proposed project to the authority. Article 4 specifies that within thirty (30) calendar days after receipt of the project brief and after its analysis, the Authority shall submit the Terms of reference to the developer for the Environmental impact study.

## **2.3. Policies requirement**

### **2.4.1. National Environmental Policy (NEP)**

The overall objective of the Environmental Policy is the improvement of man's wellbeing, the judicious utilization of natural resources and the protection and rational management of ecosystems for a sustainable and fair development.

the policy seeks to achieve this through the following objectives:

1. to improve the health and the quality of life for every citizen and promote sustainable socio- economic development through a rational management and utilization of resources and environment;
2. to integrate environmental aspects into all the development policies, planning and in all activities carried out at the national, provincial and local level, with the full participation of the population;
3. to conserve, preserve and restore ecosystems and maintain ecological and systems functioning, which are life supports, particularly the conservation of national biological diversity;
4. optimum utilization of resources and attain a sustainable level of consumption of resources;
- veto create awareness among the public to understand and appreciate the relationship between environment and development;
5. to ensure the participation of individuals and the community in the activities for the improvement of environment with special attention to women and the youth and
6. to ensure the meeting of the basic needs of today's population and those of future generations.

#### **2.4.2. Environment health policy**

The environment health policy intends to prioritize environmental health and ensure effective delivery of Environmental Health services in a coordinated manner by promoting Environment Health Education, Capacity building at various levels and intersectoral collaboration. It promoted a legal and regulatory framework that support voluntary compliance and facilitates policy implementation by the various actors.

#### **2.4.3.Environmental, Health and Safety Management Practices**

The contractor continually endeavors to ensure effective Environmental, Health and Safety Management Practices in all its activities, products and services with a special focus on the following:

- Ensuring that all activities undertaken by the Lucky Exports are consistent with the Applicable Requirements outlined later in this document;

- Ensuring that all projects are reviewed against the Applicable Requirements;
- Financing projects only when they are expected to be designed, built operated and maintained in a manner consistent with the Applicable Requirements;
- Making best efforts to ensure that all projects are operated in compliance with the Applicable requirements on an ongoing basis, during the currency of the Company's financing;
- Ensuring transparency in its activities;
- Ensuring that the management, contractors, subcontractors and the shareholders of the client companies understand the policy commitments made by the Company in this area and the Policy is communicated to all staff and operational employees of the Company ( See Appendix )

#### **a. Applicable Requirements**

Lucky Exports will ensure that all projects are reviewed and evaluated against the following Environmental, health, safety & Social requirements:

- The applicable national laws and regulations on environment, health, safety and social issues and any standards established therein (Environmental law, Environmental impact assessment guidelines, Social protection law, Rwanda Labor Law, etc)
- World Bank Environmental, health and safety guidelines (highlights of the World Bank environmental, Health and Safety guidelines for Right of way: *World Bank Environment, Health and Safety Guidelines: Natural Gas Pipelines, Transmission Systems & Right-Of-Way Alignment*. The principal elements of *World Bank* policy regarding right-of-way alignment, land acquisition, compressor station siting and creation of access (e.g., roads, Transmission lines)
- National Regulations and Standards related to Environment, health and safety:
  1. Rwanda, Ministerial order No. 02 of 17/05/2015, regulating Occupational Health and Safety in Rwanda
  2. Rwanda Labor Law No. 01 of 15/01/2012 [Art. 4,91,7,3-6,]

#### **b. Procedures**

The following areas need to be addressed by the EHS plan:

- organization, roles and responsibilities;
- training, education and competency;

- assessment and improvement;
- grievance management;
- incident management;
- reporting; and
- Managing changes.

## **CHAP 3. IDENTIFICATION OF RISKS /IMPACTS AND MANAGEMENT SYSTEM**

### **3.1. Identification of Risks**

In order to identify the risks for the safety of the persons present on and near the site, the follow in rules shall be applied;

- Analysis of the work activities foreseen in the method statement. The Method Statement analysis shall be carried out prior to commencement of the works, by the Resident Site Manager and the EHS Manager in order to evaluate the risks related to the work activities,
- Identification of potentially dangerous activities,
- Risk factors identification,
- Risk evaluation based on the probability that the event (accident) will occur (probability) and the effects on the health of persons involved (damage) on the base of the past experience held by the Contractor's similar projects or work conditions,
- Checking safe work procedures.

### **3.2. Method of evaluation**

In order to identify the risks for the safety of the persons present on and near the site,

The following rules shall be applied;

-Analysis of the work activities foreseen in the method statement. The Method Statement analysis shall be carried out prior to commencement of the works, by the Resident Site Manager and the Safety Officer in order to evaluate the risks related to the work activities,

-Identification of potentially dangerous activities,

-Risk factors identification,

-Risk evaluation based on the probability that the event (accident) will occur (probability) and the effects on the health of persons involved (damage) on the base of the past experience held by the

-Contractor's similar projects or work conditions,

-Checking safe work procedure.

### 3.3. Hazard identification

The following risks have been identified as a result of the analysis of the work activities together with the plant, tools, equipment, facilities and dangerous or potentially dangerous materials which shall be used or present on site;

### 4. Project possible consequence injuries or physical damage

- **People falling to the ground:** Slides and falls on the plan of job, provoked by presence of oil, grease or dirt on the points of grip (in the case of slope on means or cars), tripping hazards in the workplace,(for example miscellaneous debris or cords) or from bad conditions of the pedestrian visibility created by poor lighting.
- **People falling from high places (higher than 2mt):** People fall from high places, due to the loss of equilibrium of the worker and/or to the absence of suitable protections (collective or individual),slips or trips, from improperly constructed temporary work, crane or within overly steep excavations, lifting or transport vehicles ,or from any other higher job posting;
- **Drop of materials or tools:** Materials, tools or objects dropped down from higher working places or fall enduring transport with trucks ,cranes or other lifting transport plant Materials projected by blasting;
- **Landslides fall-in:** Burials and sinking in open trenches or excavations, during demolition works, etc.. Burial may also be caused by landslide of stocked materials that is stored at too steep of an angle or from collapse of near structures;
- **Running down by vehicles:** Personnel being rundown by improperly operated vehicles or allowing personnel to be in restricted area ;
- 
- **Blows, knocks, impacts & compressions:** caused by the violent contact with equipment ,structures or other object present on the workplace;



- **Pricks**, cuts abrasions: cuts, punctures, abrasions to the hands; bruises and traumas to the whole body without a specific location, for contact with the used utensil or consequent to bumps with any kind of object present in the work yard;
- **Heat, flames**: the accidental contact with parts or tools at high temperature (welding tools, grinders, parts of engines, etc.), flame so materials (bitume, hot liquids, etc.), the prolonged exposure to the heat or to the sunlight causes burns;
- **Electrocution/Fulguration**: Electrocution for direction direct contact with under tension parts of the electric line or equipment;
- **Sinking**: or drowning is a death caused by suffocation when a liquid causes interruption of the body's absorption of oxygen from the air leading to asphyxia; this posed especially during culvert works in swamps.
- **Shorts, squirts**: Lesions in an part of the body during the jobs performed by hand or with utensils, with material, substances, products and equipment that can cause evacuate dangerous for the health .Lesions concerning any par to the body consequent to the projection of splinters or fragments during workman ships performed directly or in neighboring postings of job;
- **Hurling of particles into eyes**: Lesions at the eyes consequent to the projection of splinters or fragments during workmanships performed directly or in neighboring postings of job;
- **Fire –explosion**: Lesions provoked by fires and/or consequent to the explosion due to the combustion of containers or reservoirs containing fuels, gasses or chemical substances highly deflagrating or to the blasting of explosive;
- **Vehicles accident**: includes accidental contact between two or more vehicles or between a vehicle and a person.

#### 2.4.4. Risks for health that needs long exposure to the risk.

**Vibrations**: damages to the skeletal and muscular apparatus caused by the vibrations transmitted to the worker by equipment, to parts of them;

**Noise** :damages to the auditory apparatus caused by the prolonged exposure to the noise produced by the processing, tools ,equipment, or plants;

**Dusts, fibers:** Damages to the respiratory apparatus and in general to the health of the worker, as a consequence to the exposure to fine course materials, or materials releasing minute fibers;

**Non Ionizing Radiations:** prolonged exposure to non-ionizing radiations as: electromagnetic fields with extremely low frequencies, radio frequencies, microwaves, infrared ,etc.;

**Mineral Oils, hydrocarbons:** Dermatitis, coetaneous irritations, allergic reactions or damages to the respiratory apparatus caused by the contact with mineral oils or hydro carbons or inhalation of the vapors developed during the process;

**Fumes, Gasses:** Poison in caused by the inhalation of the gases of unloading of combustion motors or of smokes or of oxides (zinc's oxides, carbon oxide, nitrogen oxide, leadoxide ,etc..) toxico riginated during the combustion, welding or thermal cut or treatment of various materials;

**Chemical:** Accidental contact or exposure to substances dangerous or toxic for inhalation ,contactor ingestion,like :acids, poisons, chemical substances ,etc.

**Other risks: risks caused by an incorrect organization of the jobsite.**

**Loads manual handling:** Lesions to the skeletal and/or muscular apparatus during the manual handling floods, as a consequence of their excessive weight or dimension or due to the incorrect position assumed by the worked during the handling;

**Ergonomics:** Muscular pains as a consequence of wrong positions assumed during the use of the equipment;

**Interferences:** Presence of different activities in the same or near working area which can interfere and transfer risk one activity to the workers engaged in another.

## **CHAP 4. ENVIRONMENTAL,HEALTH AND SAFETY PLAN RISK HANDLING PROCEDURES AND PROCESS**

### **4.1. Site environmental health and safety organization**

The Site safety plan organization is under the direct control of the Site manager who report to the Project Manager of Lucky Exports and the entire management. The Site Safety Organization shall consist of;

- Site manager ;
- Chief Engineer;
- Supervisor Engineer
- EHS Manager
- Safety Committees
- Individual staff

### **4.2. Site Manager**

The Site Manager is responsible for monitoring the implementation and effectiveness of the project including the EHS plans throughout all phases, areas and activities of the project.

Specifically he will:

- Coordinate the Health& Safety management system sat Site;
- Establish and maintain relationship with national OSH structure, key actors and relevant authorities for achieving all relevant permits and ensuring all relevant legislation requirements are met;
- Implement routinely scheduled staff meetings and coordination meetings with the Owner to discuss pertinent issues affecting the work. Provide reports and minutes of the meetings to the Owner;
- Review and approve safety reports and assessments;
- Review sub-contractors safety plans/procedures/compliance;
- Review EHS Notices and related documents ensuring that they are distributed to the relevant personnel for communication to the workforce;
- Ensure that the safety requirements of the project are met;
- Ensure the adoption and formulation of safe standards, practices and procedures including the development of safe operating procedures;
- Promote and encourage a high degree of safety awareness among staff;

- Liaison with Owner's Resident EHS Manager.

### **4.3. Site Engineer/supervisor**

The Site Engineer is responsible of guarantying the work sound progress and safe in accordance with contractual requirements and the National and Donor OSH requirements, a part of being the overall site engineering controller:

- Be part of Health and Safety Analysis;
- Warming up the implementing the health and safety rules
- Assisting the monitoring the H&S matters related to all the activities carried out on Site;

### **4.4. EHS Manager**

The EHS Manager will assist the SE to:

- Inform the workers about the risk present on Site, the preventive and protecting measures adopted;
- Train the workers on the action that shall be taken in case of accident or in case of immediate anger;
- Verify the application of the safety measures;
- Watch over the site and report immediately to the SE and to the Project Manager in case of inattention in the application of the safety rules.
- Giving Safety induction training to all new employees;
- Advising the concerned departments in planning & organizing measures necessary for the effective control of personal injuries;
- Identifying and implementing the improvement in the plant equipment and the process to improve the Safety &Health in the site;
- Checking and evaluate the effectiveness of the action taken or proposed to be taken to prevent personal injuries;
- Carrying out site Safety Inspection in order to observe the physical conditions of work &work practices and procedures followed by workers, and to advise on measure to be adopted for removing the unsafe physical conditions and preventing unsafe action by worker;
- Rendering advice on matters related to reporting and investigation of site accidents;
- Investigating first aid cases, near miss accidents and dangerous occurrences and to suggest remedy to the Management;

- Maintaining such records, as the necessary relating of first aid accidents, dangerous occurrences and industrial diseases;
- Conducting Safety Audits and organizing management Safety Meetings and implementing its recommendations, Auditing main contractor and subcontractors HS management system;
- Maintaining emergency preparedness and initiate Emergency response, assisting in rescue and evacuation drills;
- Processing accident statistics, monthly safety statistics reports & Safety schedule;
- Implementing Accident, Near misses reporting& investigation system;
- Assessing Risks for critical activities.

#### **4.4. Safety committee**

The Safety committee will assist the Safety Manager in their duties. This role will be assigned to sufficient number to cover all the working areas across project activities. The committee shall be flexible in reporting each and every thing happened in the chanter for further planning and solutions by the Safety Manager and Site Manager.

### **5. Contractor's Environmental health and safety risk handling policy**

#### **5.1. Environment Risk handling Policy**

In the Electrification project in Northern zone of Rwanda, a significant importance shall be given to the protection of the Environment.

It is in this context that operations shall be carried out and businesses conducted in a spirit of wisdom and responsibility. It is this spirit that the Lucky Exports is committed to meet environmental, economic and social needs and expectations of stakeholders.

- **Environmental Management**

The following commitments shall be made:

- Integration of environmental integrity, social equity and economic viability into business processes.

- Provide staff with the resources to make environmentally sound decisions.
- Improve energy efficiency
- Assess the potential environmental impacts of activities and propose mitigation, where appropriate.
- Conduct operations in a manner intended to prevent pollution, conserve resources and deal responsibly with all environmental issues.
- Protect the soils and surface waters by minimizing erosion and run-off in area.
- Ensure preparedness with an effective emergency response program.
  
- **Continuous Improvement**

The following commitments shall be made:

- Promote innovative thinking in the development and implementation of new ideas relating to the environmental integrity.
- Measure performance using comprehensive audits.
- Establish environmental targets and objectives to improve performance.

- **Communication Policy**

The following commitments shall be made:

- Respond to the concerns and views of stakeholders in a timely and open fashion.
- Engage interested parties, when necessary, to discuss business operations and their relationship to affected communities and the environment.
- Provide clear and candid environmental information about the products, services and operations provided by the Park to customers, employees, government agencies and the public, as appropriate.

- **Community relations policy**

Lucky Exports is committed to conducting business under the highest social performance standards in a manner that respects the environment, culture and customs of the communities within the area of direct influence of the project. Lucky Exports will build a legacy of trust by carrying out their

activities with environmental, health and safety responsibility and by implementing development that are sustainable and that consider a balance between the economic viability of the project, staff, all involved actors and the needs of the communities in the direct area of influence. Lucky Exports commitments are based on the following community relations principles:

- Conduct operations with high standards for personal integrity and ethical behavior
- Respect the laws and regulations of the government with whom it works and the beliefs and values of communities.
- Respect the commitments in international Labor and human rights conventions.
- Promote equal opportunity for employment regardless of gender.
- Provide a means for open exchange of information that is clear and relevant among communities, leaders and affected parties.
- Communicate expectations regarding community relations to all employees and contractors.
- Implement Corporate Social Responsibility programs that directly benefit the local communities. and
- Routinely review the effectiveness of community relations programs.
- 

## **5.2. Health and safety handling Policy**

Lucky Exports is committed to conduct business safely and continually improving the policies and practices for the future. The aim is to create a workplace culture to integrate safety into all activities, every day. A special effort will be dedicated to maintain the corporate goal of an accident-free workplace and will continue the pursuit of excellence in health and safety through the following practices.

### **• Health and Safety Management**

The following commitments shall be made:

- Conduct operations in a manner that protects the health and safety of employees, the public and the surrounding communities.

- Require employees from all levels of the organization to participate in Health and Safety Program and both individually and collectively take responsibility to work safely.
- Provide employees with the required job-related training and safety-related education.
- Seek compliance with all applicable legal and regulatory requirements.
- Investigate incidents and accidents to determine root cause.
- Ensure contractors that work for the Project are committed to conducting all business operations safely and in compliance with all applicable laws and regulations.

- **Continuous Improvement**

The following commitments shall be made:

- Employ regular audits to enhance successful accident prevention programs as well as to identify, if possible, areas for further improvement.
- Implement measures to minimize or eliminate all identified hazards in the workplace and in all activities related to its operations.
- Maintain safety statistics for both employees and contractors to track improvement.
- Annually review the overall Health and Safety Program to ensure its on-going effectiveness.

- **Communication**

The following commitments shall be made:

- Ensure all workers, whether contractors or employees, are aware of their right to refuse work that they determine to be unsafe.
- Inform employees and contractors of potential safety hazards on a continual basis.
- Encourage all workers to report immediately and, where appropriate, remediate any unsafe work conditions or activities.
- Openly communicate hazards and emergency response plans throughout the workplace employees and to affected communities and other stakeholders.
- Conduct general safety meetings and job-specific safety meetings as required and planned.



### 5.3. EHSP implementation measures

#### 5.3.1. Personal Protective Equipment's (PPEs)

Personal protective equipment (PPE) protects employees from the risks of injury by creating a barrier against work place hazards .PPE shall be used when the eyes, face, hands, extremities, or other parts of the body are exposed to workplace hazards that cannot be controlled by other means.

- **Head protection** will be worn on job sites when there are potential so falling objects, hair entanglement, burning, or electrical hazards;
- **Eye protection** will be worn when there are potentials of hazards from flying objects or particles, chemicals, arcing, glare ,or dust;
- **Protective footwear** shall be worn to protect from falling objects, chemicals, or stepping on sharp objects. Athletic canvas-types shoes shall not be worn;
- **Body protections like overall, raincoats**, shall be provided and wear in all that activities where risks for the body like (acids or corrosives substances, burns, pricks, cuts, abrasions ,etc.) are present;
- Appropriate **respiratory masks** shall be provided to prevent damages to the respiratory apparatus in presence of dusts, gasses or other substances;
- **Protective gloves** or clothing shall be worn when required to protect against a hazard;
- **Ear protections** shall be used when the workers are exposed to high noise level;
- **Harnesses, Helmets and lanyards** shall be utilized for all protection as required;
- **Safety belts** shall be used when working at the height
- **Signal Jacket** is to be worn by every person in the site for easy identification and localization

The use of others PPE shall be valued from time to time and provided and wear to the workers involved in the activity or exposed to the risk.

- **Distribution of PPEs**

All new employees, before starting their activities, shall be provided by all the protective equipment needed in connection with the risks they can be exposed in the course of the inductees. Special PPE will be given to the workers in case of particular activities to be carried out. At the act of the delivery of the PPE each worker shall be informed and trained on the correct way to use and conserve them. Each worker will sign for receipt of the PPE.

Records of all the PPE given to each single worker, including any replacement, shall be kept, by means of individual cards, and from safety Department. The PPE will be replaced periodically never they are damaged in away to be useful for safety purposes. Checks shall be carried out on the existence, use and condition of the personal protections assigned to each worker. Each worker who is found on site without the PPE will not be allowed to work and shall be sent out of the job site and sanctioned. If the item is misused, misappropriated or lost, the worker shall be strictly sanctioned.

#### 5.4. Signs and markings

Sign boards indicating the obligation to wear PPE, or other safety measures, as well as dangers or hazards, will be placed at the entrance and in the proximity of each working area. There are three major types of signs and markings, the samples of which shall be established in due time.

- **Warning signs:** are used to properly identify and warn of possible hazards. They should have triangular shape, black text on a yellow background and should always include a pictorial symbol.
- **Prohibition signs:** are used to properly give a clear message that a certain action is prohibited. They should have round shape, black pictorial symbol, white background, red border and 45 degrees red diagonal band across the symbol(from upper left to lower right).
- **Safety signs:** are used to proper identify the locations of emergency equipment. They have green background with white pictorials symbols.

**Fire-fighting signs:** Each item Fire-fighting equipment should be marked with the appropriate symbol. Where various types of equipment a restored at one location,` Fire Point "signs maybe used .When equipment is to red in cupboard ,a panoramic sign, mounted well above head height, should be used to enable the equipment to be identified from a distance. The proper use of these signs and the appropriate compliance with their indications shall prevent potentially dangerous situations and accidents.

#### Electrical facilities

- Electrical connections and related works shall be performed by qualified electricians, or under strict supervision of qualified professionals.
- Electrical systems shall comply with the local regulations on High and Low Voltage Facilities.
- The distribution centers shall consist of standard steel cabinets, with mounting plate at there are, readily accessible from the outside. They have doors fitted with thumb latches and

triangular key sand suitable for the installation of padlocks .In addition, they are provided with the following:

- Automatic sectionalizing switch;
- Grounding network (the resistance of the grounding network shall not be greater than that against which it protects, depending on the sensitivity of the differential breaker);
- Differential circuit-breaker.

The differential circuit breaker shall have medium sensitivity in the usual case that the equipment and machines are connected to the ground network and the resistance of said equipment does not exceed 200hms. From these general distribution centers, connections shall be made for the secondary circuits, which, in turn, shall be provided with cabinets fitted with tight in lets, with the power be in supplied always through a female socket.

Such secondary boards shall be provided with a general ground terminal, with a standard circuit breaker (with circuits calibrated for each of the taps maximum of three) and with a high-sensitivity differential breaker (30mA).Where portable devices are used in high-humidity areas, provision shall be made for safety transformers, with a maximum rating of 220volts,or a safety voltage shall be used (24V).

## **5.5. Electrical facilities safety measures**

As a rule of thumb and nail, the following precautions shall be taken with regard to these facilities:

- Both the board and equipment terminals shall be protected with insulating tape;
- The cables that supply power to the equipment and tools shall be provided with protection covers, which shall be of the humidity-proof kind and shall not touch, or be laid, on the floor in passage areas;
- It is strictly forbidden to use cables with bare tips, unless properly connected. Plugs should be used;
- All power lines shall be disconnected by switching the breakers off;
- Periodic servicing of all the facilities is essential. This servicing shall be thorough and conducted by specialized personnel;
- Notices shall be used to indicate all electrical risks, as well as the performance of servicing work;

- In case of ongoing electric shock that has not been controlled by switch-breakers, the cable giving electricity has to be disconnected immediately without touching the part of cable/appliance that is causing the accident.

## **5.6. Site roads and traffic rules**

Unfortunately, one of the first causes of injuries on site is vehicular accident. Site roads shall be:

- Wide enough to allow the free circulation of the vehicles in both ways. In case that the ground morphology does not permit the realization of a double way road, then lay-by shall be foreseen;
- Maintained always in good conditions, clean of mud and freestones, and free of holes;
- Speed reducers like bump sort reaches shall be done across the roads prior to dangerous curves, bottlenecks or dangerous areas; this procedure shall follow the Traffic management Plan of the Project.

### **• Traffic rules**

The following rules shall be followed inside the site area:

Maximum speed for all the vehicles shall be fixed, unless otherwise specified in the traffic management plan of the project:

50K phone site roads;

30K phone proximity of working areas;

Overtaking between truck in busy work areas is not allowed;

Any vehicle descending a down hill road shall give way to the one rising.

Outside the project area the country traffic rules shall be respected. Anyone found not respecting the above rules will be subject to disciplinary measures.

## **5.7. Injury and Accident management**

In case of injury, accident or near miss, the workers involved shall immediately report it to their Foreman, regardless of the seriousness of the event. Based on the nature/sources of the event (related to environment, health or safety), the Foreman shall implement promptly the emergency management procedure and inform the assigned Supervisor and the EHS Manager, for safety as soon as

practicable. The EHS Manager in collaboration with the Supervisor, shall immediately fill the “notification report”(Annex A) and submit it to the Supervision Engineer (SE).The SE shall transmit it to the responsible persons based on the magnitude of the event.

In case of high level injury/accident, the Project Manager (PM) shall be immediately informed by the SE. The PM shall inform Lucky Exports management, the client and supervising engineer.

The typical incident reporting form filled by the Safety Manager shall include the following details ( see appendix 2):

Description of the event;

Causes of the event;

Damages;

Injury

Personnel or equipment involved in the event

Time of the Event

Place of the Event

Witnesses;

Corrective Actions;

Further information/attachments.

Whenever needed the EHS Manager will request persons involved in the event or witnesses to provide input in the investigation form. The completed form shall be then sent to the SE and subsequently to the PM for approval. Special attention to:

- Corrective measures identified and carried out with designation of the responsible for corrective action and estimated date of closure;

- Proposed additional corrective measures with designation of the responsible for corrective action and estimated date of closure.

Accident cases shall be discussed during specific Safety Talks, called as soon as possible by the EHS Manager and involving at least the Supervisor (SE),and the foreman having witnessed the event.

Record of the meeting shall be prepared by the EHS Manager and transmitted to all the participants.

At the estimated scheduled corrective action date of closure EHS Manager checks the implementation of the action. In case required actions have not been fulfilled the EHS Plan officer requires the support of PM and calls a Safety Talk involving at least Supervisor. The EHS Plan officer shall fill the “ Monthly Injury Report and HS metrics” and in addition, after any injury/accident/near miss event, the EHS

PLAN officer shall update the“ record book” .The PM, according to information contained in the Monthly Injury Reports and injury/accident reports, shall fill monthly overall reports that shall be sent to the Site Client Representative. (Appendix 3)

### 5.7.1. Load handling

Load handling implies potential hazards, with high-risk levels for both operators and Labour working in the handling area; also ,the handled load could get damaged. This activity requires especially trained personnel and lifting/harnessing equipment in mint conditions and adequate to the load to be handled. The basic elements are the load to be handled and the handling operation to be carried out. In function of the load and of the type of handling, you shall carry out a careful selection of handling and harnessing equipment and safety actions.

- **Load to be handled and handling operation**

All the selected personnel shall know the following load characteristics:

- Typology;
- Weight;
- Centre of gravity;
- Harnessing points.
- All these laced personnel shall know and evaluate the following details of the handling operation:
  - Distance and gradient between harnessing point and landing point;
  - Transport route and possible obstacles to overcome;
  - A complete view of the operation;
  - Difficulties related to final positioning
  - Details of the equipment to be used to move the load.

- **Typology**

Typology means shape and physical characteristics of the load to be handled. The shape can be regular or irregular, and this can imply stability or instability. The shape can have as mall or big volume and/or it can be quite long (forex. Piping).

*This can make handling easy or hard due to narrow spaces, hindrances or external **actions** (forex. Wind):*

- A load placed inside a package also requires particular precautions; in fact ,if the materials placed inside are not correctly secured, they can create a displacement of the centre of gravity due to oscillation;
- A load of dissolved materials shall not be handled unless you have previously consolidated all its components and created a sole body;
- Flexibility of the materials shall be considered.
- The transport of people using lifting devices is absolutely forbidden, unless specific qualified equipment(basket) is used.

- **Weight**

Knowing the weight of the load to be moved is essential. The weight shall be recorded on the documents supporting the load or on the product manufacturing drawings. In their absence, it is necessary to assess the weight that shall be estimated in excess (For ex. a metal body with a cavity shall be evaluated as if it were a full solid).

- **Centre of gravity**

The centre of gravity of the load to be handle desacriticalement. This element is fundamental also for storage operations (load stability). Depending on where an items centre of gravity is located the item at rest may be in a stable or unstable condition. When the item is to be moved it is important to review the positions of the lifting points in relation to the items centre of gravity.

The centre of gravity, if it is not identified on supporting documents, product or manufacturing drawings, is quite easy to determine on a regular body ,but very hard on irregular bodies or packages that have not been previously inspected. In such case, the lifting initial stage is fundamental to identify the centre of gravity (the lifting device hook always stand s to position itself in correspondence with the centre of gravity).

- **Harnessing points**

In many cases ,loads feature harness sing points included during the product design stage, and in such case, identified on the manufacturing. It is important not to mix these harnes sing points with those of the single components forming the product .In other cases, the products have threaded holes for installing eye bolts or shackles: such harnessing points shall be included during design and identified on the manufacturing drawings. In many cases ,the hook up man decides the harnessing points.

*In this case the choice shall be carried out with extreme attention, and in particular the following actions shall be made:*

Harnessing points shall guarantee a firm hooking and grip also in the event of a bump or loosening of the harnessing equipment;

The centre of gravity shall be below the harnessing points;

The centre of gravity shall be vertical compared to the lifting hook.

### **5.7.2. Lifting equipment**

Where not particular requirements are specified, the following general safety requirements and actions are considered sufficient, especially for poles and Transformers erection (For this project):

All lifting operations shall be directed by only a single crane operator standing in safe position;

All the lift equipment and means shall be in compliance with Rwandan and international OSH laws and standards;

Before starting to use a lifting equipment the SE shall ensure that there is no wind speed faster than 40km/hours;

Before starting any lifting/translating operation, a sound alarm shall be activated to advise all present persons of the beginning of the operations;

Before starting any lifting activity all safety devices such as limit-switch devices and brakes, shall be checked;

Before every use the lifting device is given a reason able visual inspection to check that the equipment looks to be in good repair and then every 3 months a more through visual inspection is performed for every chain, rope, hooks, shackles, brakes etc....;

The lifting means and equipment and materials to be lifted shall not be used unless it is of a good construction, sound and suitable material, adequate strength, free from patent defect and properly maintained;

All the lifting equipment shall be tested and examined by or on behalf of the manufacturer or by an authorized person and certificate of the test and examination specifying the safe working load,



signed by or on behalf of the manufacturer or by the authorized person is obtained and kept available for inspection;

No guards of safety devices shall be disabled or removed.

All the lifting equipment shall be provided of a schedule with a load diagram which show the load that is possible to lift including safe lifting loads as a function of the length of the boom;

Use step and hand holds when mounting or dismounting any machine;

Clean any mud or debris from steps, walkways or work platforms before using them;

Always face the machine when using steps, walkways and handholds;

Never transport persons inside buckets (unless specifically designed for personnel), on walkways or on platforms;

Never stand near operating machine while lifting or transporting materials;

Drivers and operators shall always keep safety belts fastened while operating;

The maneuvers of vehicles and trucks shall be directed by a single ancillary personnel who shall assist the drivers and operators

To reduce vibrations transfer to the operator body, all heavy vehicles and plant shall be equipped with adjustable suspension seat.

## **5.8. Emergency procedures**

Procedures to face all kinds of emergencies that should verify on site shall be foreseen. The following Emergency procedures shall be drawn up: “First Aid at Site” Procedure shall be written together with the site medical team and shall consider:

The location of the activities and the possibility that an accident will occur based on the risk evaluation;

The location of the nearest first aid point equipped to face up the type and gravity of the accident;

The location of the nearest ambulance;

Other conditions to be evaluated from time to time.

In addition, “Fire control” shall take into consideration:

The causes of fire;

The location of the nearest fire-fighting equipment (extinguishers, water tanks, etc.);

The type of the burning material and the fire-fighting indications;

The presence and number of persons present in the area of the fire;

Other conditions to be evaluated from time to time;

All the procedures needed to face up the emergencies that can occur on the site.

All emergency procedures shall be verified through simulations and modified according to the results.

All Sub-contractors involved in the construction activities with our organization shall follow strictly the safety measures included in this plan.

## **5.9. Risks& hazards handling measures**

Each time that, during a site inspection, a hazardous situation is found, a Risk &Hazard Report shall be issued. It shall include:

Date and time;

Name of the inspector;

Place of work;

Description of the hazard;

Suggested measures to be taken;

Measures taken.

It shall be signed by the EHS Manager, the Site Engineer and then sent to the Project Manager for actions.

## **5.10. Management of contagious diseases**

A Contagious disease is one that can be spread by contamination of blood or communicated from one person to another. The most common examples are HIV/AIDS, Hepatitis B and viral hemorrhagic fevers. Diseases that are not usually transmitted directly by blood contact, but rather by insect or other vector, are classified as vector-borne disease, even though the causative agent can be founding blood.Vector-borne diseases include, but not limited to, malaria, yellow fever and river blindness. This section examines concerns for workers and community health related to blood-borne diseases (HIV/AID Sand to the STDs),vector-borne diseases considered to be potentially critic in the may include Ebola.

*Apart from the contractor, sub-contractor and employees, other parties involved are local entities (Health related Units), Health centers/Posts, Hospitals, Local Health NGOs, CBOs with health interventions and shall be consulted and be engaged in the awareness program to ensure successfulness.*

Vaccination against yellow fever is mandatory to be admitted to Rwanda. Other relevant vaccinations (e.g. Hepatitis A, B & C meningitis ,typhoid are strongly recommended for all foreign personnel. In general, a good housekeeping and hygiene at site help to prevent the rising of diseases. Health conditions of the employees at LuckyExports premises shall be controlled on a regular basis.

In any case, whenever an employee recognizes a symptom of any diseases described in this plan, or for any other specific health concerns, he/she shall immediately consult the Site Physician from nearest health center. The Site Physician, depending on the circumstances, shall apply the general health procedures on employees.

#### **5.10.1. Awareness and prevention**

The rate of prevalence of HIV found the project area according to RBC report (3%), 2016 but it could be exacerbated through spread of the disease by construction workers, truck drivers and prostitutes attracted to worker residential areas. The human resource management measures described in this section shall be adopted to promote awareness on HIV/AIDS and STD sand to prevent unsafe behaviors by the workers.

Unskilled workers (laborers) will be recruited, as available, from the local population and particularly from the villages affected by the project. No construction local employee camps will be erected at the project site. Therefore these workers will remain resident in their homes. SBI shall provide transportation to laborers between their home villages and the site. It is the SE's responsibility to ensure that such transportation system is in place. For expatriate workers, who may be accompanied by their families, family accommodation shall be made available, under the PM's responsibility. Lucky Exports shall work with nearby health centers to distribute condoms, supplied by the Owner, at no cost to the workers.

These will be provided together with relevant instructions, by the Site Physician.

Records of condom distribution program, while protecting privacy, shall be maintained.

In order to ensure awareness of all employees on STDs issues:

Initial orientation awareness sessions shall be performed at site for each worker.

This will be provided by the Site Physician, with the support of SO and under the SE supervision.

A record of each worker's initial orientation awareness session shall be kept. In addition, an STD/HIV/AIDS awareness and prevention program will be incorporated in to the training package for all workers. This may be developed and delivered by an NGO (e.g. TASO, The technical AIDS

Support Organization or local similar NGO) with solid track record in Rwanda, under the Owner's responsibility.

If appropriate, further awareness measures will be considered such as posters or radio public awareness messages.

Posters or hand outs will describe the project policies with respect to STD/HIV/AIDS and be availed to project staff and nearby communities.

An STD/HIV/AIDS awareness and prevention program should also be delivered to local communities in order to reinforce the awareness and preventative measures in place. This may be developed and delivered by the same NGO in coordination with the District Health Officers, under the Owner's responsibility.

### **5.10.2. Hygiene practices**

Basic hygiene and health precautions shall be observed to prevent contact with blood or the potentially infectious materials with the aim of avoiding infection. In addition, the following actions shall be obeyed by all personnel at Lucky Exports sites:

In every circumstances skin contact with non-intact skin, wounds, blood, body fluids and other potentially infectious materials shall be avoided;

In case of accidental contact with blood or other potentially infectious materials, all employees shall thoroughly wash hands and any other skin with soap and water and/or flush mucous membranes with water as soon as feasible and remove contaminated clothing;

In case of wounds, cuts or bleeding during work, the work activity shall be immediately stopped and the medical team shall be consulted for receiving adequate medication.

Touching any broken crystal, cutting or sharpened objects without adequate PPE is forbidden;

Sharing personal items (e.g. tooth brush, razors, etc..) is forbidden;

The medical staff shall be adequately trained on the fit practices that minimize the probability of infection (for example, but not limited to: always wear PPE when dealing blood, wounds and potentially infectious material, ensure hygiene of site medical facilities, etc.);

Needle sharing it is not permitted and all the adequate sterilization methods for the remedial instrumentations shall be put in place;

Remedial waste (e.g. needles, gloves, medical blind folds) shall be managed.

## 6. Site access

Only authorized personnel and vehicles shall be allowed to enter the site area. All contractors' and sub contractors' shall provide in due time the following details so that provisions for permit issue and access can be assured:

List of vehicles for which site access is required giving the type, registration and function,

Name of personnel and their function,

Particulars of any deliveries to site in accordance with the agreed procedure, with specific advance notification for heavy or abnormal loads,

Details of materials leaving the site. In all cases materials shall only be allowed to be taken out from the site with written authorization of an authorized representative of the electromechanical works leader.

## 7. Working areas maintenance

Material shall be put back in place after use. Tools and appliances under tension should never be left unattended. Local electrical circuits shall be disconnected outside working hours.

All equipment is to be regularly checked. Some equipment such as cranes and lifting appliances shall have and follow their own safety inspection procedure with a checklist (Appendix 5).

The storage of dangerous or flammable materials shall be in controlled areas, with their issue limited to daily use and excess quantities returned to the store at the end of the working day.

Order and tidiness

Working areas and roads should be regularly cleaned and maintained in good order.

Waste, scrap and oil spills are to be removed quickly. Each Party is responsible for the transport and correct disposal of its own waste, scrap and spills in accordance with all local law and regulations.

Signs

***Signs are to be erected to warn personnel and the general public of danger in busy construction area, concerning in particular but not limited to:***

- -excavations,
- -hazardous materials,
- -Test areas.
- -Asphalt works
- -Base works
- -Survey works etc.

## **8. Other general health measures**

After ensuring that all employees are bearing their personal valid insurances (this is compulsory for every contractor's site workers prior to be employed), Lucky exports shall assure to its workers all the medical assistance as:

- First Aid at all site
- Medical visits in case of sickness;
- Workers health surveillance

Furthermore, to assure good health conditions inside the site structures, the following activities shall be carried out:

Quality controls on drinkable water (camps, site installations, offices, etc.);

Quality controls on food, kitchens, food stores, etc..;

Periodic checks on food handlers like cooks, attendant staff, in general, all the canteen personnel;

Disinfestations against mosquitoes and others potentially dangerous insects;

Any measure to be adopted to prevent parasitic or epidemic diseases;

An accurate information to the workers about the parasitic or epidemic diseases which can be present and the prevention measures to be followed.

In consideration of the location of the project, the number of workers involved in the works, and the dangerousness of the activities carried out, a number of First Aid facilities shall be realized on site and provided of personnel, furniture, medical tools, medical apparatus and whatever shall be considered necessary in relation with the location of the site and the distance between the project and the medical facilities available in the area.

## **9. First Aid Kit**

Stations are structures designed to give first assistance to injured persons victims of accidents or to visit workers which, during their working activities, feels unwell. They basically consists of small structures, that eventually can be moved to follow the development of the activities, provided with whatever is necessary to give the assistance needed to put the worker in conditions to be transferred in other structures (site clinic or hospitals) for further assistance. An ambulance shall be located nearby. They shall be in number enough to cover all the project area, and located in the areas with higher risks taking in consideration the activities carried out. Their services shall be available whenever there are working activities in the area.

## **CHAP 5. TRAINING AND CAPABILITY BUILDING**

The contractor-Lucky Exports assumes overarching responsibility for implementation of the EHS plan as such, it is important that all contractors/sub-contractors and personnel responsible for the implementation of the tasks and requirements contained in the EHS plan are competent on the basis of education, training and experience.

### **5.1. Induction course**

All newly recruited shall have to undergo induction training before commencement of any work activity with the contractor. Workers shall receive this competency training depending on the nature of activities they shall execute. In these trainings, the new recruits shall be introduced to the company safety rules and regulations. Note also sub-contractor and their employees shall be inducted. All trained personnel shall sign against their names to confirm their attendance.

### **5.2. Specific Trainings**

Lucky Exports will undertake internal training and education activities to ensure that Project expectations regarding environmental, health and safety performance are achieved. In addition, the Project will provide guidance to contractors regarding expectations for SHE management training, education and competencies. SHE competencies will be appropriate to the respective parties' scope of activity and level of responsibility. Project will undertake an initial evaluation of training needs associated with nature of project activities and this EHSP and, on this basis, develop and maintain an OHS training matrix.

The Project's environmental, safety and health training program will include several levels of competency, depending on each individual's level of involvement and responsibility:

### **5.3. Induction Training and Awareness:**

this training will be for visitors or individuals who do not have direct roles or responsibilities for implementing the EHSP, and will cover basic Project health and safety commitments.

### **5.4. Management Training and Awareness:**

this training focuses attention on management; covering key aspects of the EHSP and providing an overview of the Project's health and safety management potentials and the supporting practices prescribed in this EHS plan to meet performance prospects.

### **5.5. Job-specific Training and Awareness:**

job-specific training will be provided to all personnel who have direct roles and responsibilities for implementing or managing components of this plan. This training will also include all people whose specific work activities may have an occupational safety and health related hazards.

## **6. Competency trainings**

These trainings will be provided to all contractors and subcontractors and employees. Those responsible for performing site inspections will receive training by drawing on external resources as necessary. Upon completion of training and once deemed competent by management, staff will be ready to train other people. The Project will require each contractor to institute training program for their personnel. All contractors and their subcontractors will be responsible for implementing relevant and adequate training program to maintain the required competency levels. Contractor training program will be subject to approval by Project Management and will be assessed to confirm that training program are adequate all relevant personnel have been trained; and

Competency is achieved. The contractor will be required to report on the training activities, and the Project will maintain records of all training delivered.

The key contents of the OSH training will be focusing on the following, based on the nature of the project activities after establishment of site safety committees and availing all recording forms, register books and reporting forms and tools and equipments:

- Project activities and their related hazards



- -Nature of hazards, accidents
- -Emergency preparedness and rescue
- -First Aid Kit content and use
- -Tools and equipments cautions and use
- -Hazards analysis, incident recording and reporting
- -Site waste management
- -Site-social responsibilities
- -Change management
- -Insurance and site risks prevention and management
- -Safety communication systems
- -Implementation of improvement actions

## **CHAP 6: STAKEHOLDERS ENGAGEMENT AND COMPLAINT APPLIANCE**

This section of the EHSP provides an overview of Lucky Exports plans and commitments to provide on-going opportunities for stakeholder and community engagement while implementation the electrification project. It also provides plans to advance sustainability initiatives during Project Construction and Operation and through Decommissioning.

These plans and commitments are consistent with Lucky Exports commitment to working hand in hand with the public, stakeholder groups and communities to achieve the responsible development of the electrification project and to contribute to the sustainable development of the communities around it.

Since the beginning of preliminary Design studies, Lucky Exports will actively engaged with the public, stakeholder groups and local communities about the Project and key objectives of this engagement have been to:

-identify parties with an interest in the Project, understand their interests and concerns, and ensure opportunities for their participation;

- build long-term and mutually-beneficial relationships;
- establish effective communication processes;
- allow for meaningful input into the Project planning, design and development activities; and
- Ensure effective tracking and documentation of engagement activities and issues.

Lucky Exports intends to continue these engagement activities through the Project review, approval and permitting processes. Following approval to implement the Project, Lucky Exports engagement activities will continue with much the same scope and objectives, adjusted to respond more appropriately to the requirements of Project Construction and Operation. A comprehensive Public, Stakeholder and Community Engagement will be adapted throughout the life of the Project to respond to evolving needs.

## **6.1. Engagement Programs during Project Implementation**

### **6.1.1. Objectives**

Lucky Exports is committed to ongoing engagement of the public, stakeholder groups, communities and affected/project beneficiary throughout Construction, Operation and into site decommissioning. Key objectives of the ongoing engagement program are:

- to ensure transparency and accountability about the company's OSHA responsibility performance;
- to ensure there are continuing opportunities to discuss interests and concerns, and to resolve issues, related to the Project; and
- to work in partnership with local communities and stakeholders to have the Project contribute to the achievement of their own development goals based on their priorities and aspirations.

### **6.1.2. Engagement Dimensions**

There will be a number of dimensions to Lucky Exports engagement program as described below.

Lucky Exports is willing to modify or expand on these as may be required to more effectively ensure that the engagement objectives are met.

### **6.1.3. Site safety committee**

A key component of Lucky Exports engagement program will be a field team which will collaborate with nearby communities, local authorities, affected Persons and perhaps other stakeholder groups to form the engagement committee. The purpose of the Committee is expected to be to:

Daily safety (Incidents, accidents, near misses) records and reporting

Information sharing and oversight of job sections on OSH issues

provide a forum for exchange of information and discussion regarding issues they arise, and for developing effective means for addressing such issues; and implementation of OSH system improving actions.

#### **6.1.4. EPC contractor offices**

Furthermore, During Construction, there will be significant interest in the on-site activities as well as business, contracting and employment opportunities. Lucky Exports has established temporary office in the project and another office in Kigali. These offices provide information on the Project, answer questions, and collect any comments or questions from members of the public. This office will provide the public with information about employment, procurement and contracting opportunities.

#### **6.1.5. Site Tours and Open Houses.**

During Construction and Operation of the Project, Lucky Exports will provide guided tours (pre-arranged) and conduct open houses at key milestones to keep the public informed about the Project.

#### **6.1.6 Presentations and Meetings.**

Lucky Exports has been active in meeting and presenting the Project and updates to a number of individuals, stakeholder groups, individuals representing stakeholder groups, business groups, and Cells, sectors and district officials as appropriate, IA will meet with, and make presentations to, individuals, stakeholder and communities on specific topics of interest to them.

#### **6.1.7. Communication, E-mail and Phone call**

Lucky Exports will explore the possibility of creating project Email and provide phone contact that can be used by stakeholders express their views, concerns and request information.

**Table 4: Local Bilateral Emergency Intervention Agencies**

	<b>LOCAL BILATERAL EMERGENCY INTERVENTION AGENCIES</b> ( as per emergency centralized services, countrywide, this contacts are the same and valid)	
SN	SERVICE	DIRECT CONTACTS/Toll free line
1	Police Department	Police Emergency : 112
2	Fire Department	111
3	First Aid Services	Trained one/Nearest Health facility
4	Ambulance Service/SAMU	912 / 0788 622 524
5	Breakdown Service	Police Emergency : 112/999
6	Gender based Violence	3512
7	Abuse by an officer	3511
8	Traffic Accidents	113

## **CHAP 7: REPORTING AND DOCUMENTATION**

### **7. Reporting and monitoring**

This section outlines the reporting and notification associated with implementation of the EHS plan. The Project and contractors will work closely together to identify and agree all such Project notification and reporting requirements. It is envisaged that reporting will cover at least the following areas:

#### **7.1.1. Contractor Monthly Reporting**

Contractor will work closely with the Project sub-contractors prior to the commencement of work to express the competent structure, content and format for the EHSP monthly reports. These reports will contain key information around the contractors' implementation of the EHSP requirements and will cover, among others:

- Safety and health inspections records and improvement findings;
- Incident notifications proof, if happened;
- Non-conformances/non-compliances and corrective actions;
- Key performance indicators;
- Details of any incident, hazard and any other associated site specific safety and health issues;  
and
- OSH training conducted.

#### **7.1.2. Quarterly Reporting**

A part from flash and monthly reports, The Project will prepare and submit to the relevant government departments a **Project Safety and health Quarterly Report**. The structure, content and format to be respected and familiarized prior to the commencement of work. This quarterly report will document key information on the Project's performance against the EHS/OSH requirements.

### **7.1.3. Incident Notification and Reporting**

Contractors will notify the Project immediately following any occurred health and safety incident. Project will ensure that all incidents are appropriately documented, that the relevant parties are notified, and that reporting requirements around the incident are met based on daily records and following day briefing by site specific safety committee and the SHE Supervisor.

### **7.2. Managing Changes**

Changes in the Project may occur due to unanticipated Project developments. This EHS plan, for example, is being undertaken prior to the completion of the design stage of the Project. Wherever possible, the Environmental, Health and Safety measures should be updated depending on final designs.

As the project planning progressed, certainty regarding the nature and magnitude of effects sources became clearer to the Project and the relevant changes should be made in the EHSP. The Project will implement a formal practice to manage changes that will apply to all Project activities. The process for dealing with Project changes and uncertainty recognizes three levels of change/uncertainty:

- **Level One: Minor Significance**, where the change or uncertainty is largely deemed to be immaterial to the EHSP findings, and does not affect the Project's ability to meet Safety, Health and Environmental Performance requirements outlined in the EHSP. This change may require additional but limited Safety and Health Investigation actions.
- **Level Two: Moderate Significance**, where the change or uncertainty is deemed to be material to the EHSP findings, but is within the boundaries of the defined Project base-case covered by this EHSP. This may require minor changes to the EHSP and additional investigations.
- **Level Three: Higher Significance**, where a future significant change or uncertainty leads to a departure from the base-case, or a key aspect of it. An addendum to the EHS plan will be reflected.

### **7.3. Documentation and document control**

The abovementioned process will ensure that the Project is able to adapt to changes whilst meeting the relevant safety and health performance requirements.

In its EHS completion report, the contractor Lucky Sports will include the following documentation:

- description of the project scope and associated the EHS plan components;
- description of the main elements of the EHS plan and their interaction had with the project
- documents including records consistent with Rwandan OSH requirements and the donor
- Documents, including records, determined by Lucky Sports used to ensure the effective planning, operation and control of processes that relate to its significant health and safety aspects and a phase per phase rate of improvement (if minor safety and health accident/and or incidents occurred).

### **7.4. Control of Documents**

Documents required by the EHS plan will be controlled by Lucky Sports and will establish, implement and maintain procedures to:

- approve documents for adequacy prior to issue;
- review and update as necessary and re-approve documents;
- ensure that changes and the current revision status of documents are identified;
- ensure that relevant versions of applicable documents are available at points of use;
- ensure that documents remain legible and readily identifiable;
- ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the EHS Plan are identified and their distribution controlled (e.g., national OSH guidance, permits);and
- Prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.



**7.5. COST ESTIMATION FOR PLAN IMPLEMENTATION**

SN	ACTIVITY	COST (US\$)	RESPONSIBLE
	Safety Committees establishment	1,450	<ul style="list-style-type: none"> <li>Contractor- Lucky Exports</li> <li>SHE Consultant, Project/Site staff</li> </ul>
	-OSH Training of project staff, -Training on First Aid Kit use	2,750	<ul style="list-style-type: none"> <li>Contractor/HSE Consultant</li> <li>Project/Site staff</li> </ul>
	Stakeholders engagement	3,425	<ul style="list-style-type: none"> <li>Contractor and HSE Consultant</li> <li>Rulindo, Burera and Rubavu Districts and respective concerned sectors and cells,</li> <li>Local health Institutions from stated Districts</li> <li>Safety and Emergency support entities</li> </ul>
	Awareness on STDs/HIV	1,800	<ul style="list-style-type: none"> <li>Contractor/HSE Consultant</li> </ul>
	Records investigations and reporting	1,400	<ul style="list-style-type: none"> <li>Contractor's Sites Managers,</li> <li>HSE Manager,</li> <li>Safety Committees</li> </ul>
	Emergency rescue and Aid operations	4,950	<ul style="list-style-type: none"> <li>Contractor/subcontractors</li> <li>Emergency support entities</li> </ul>
	Monitoring and improvement	1,100	<ul style="list-style-type: none"> <li>Contractor,</li> <li>EDCL/RESSP</li> <li>Districts</li> </ul>
<b>TOTAL</b>		<b>16,875</b>	

## **CONCLUSIONS AND RECOMMENDATION**

- **CONCLUSION**

This Environmental Health and Safety plan have been developed in Relation to for the electrification of Northern area of Rwanda and is a living file and will be reviewed time to time to fulfil with complexity of proposed projects, projects areas, project's needs upon certain work conditions. The Plan will guide all Lucky Exports staff, subcontractors, employees and all other stakeholders to obey with environment, health and safety requirements. Hence more, the Plan will be implemented in acquiescence with other plans developed for the project including the design plans and a site specific Environmental and Social Management plan.

- **STRATEGIC RECOMMENDATION**

Based on the nature of the current project activities and the developed plan and its key facts and aspects to be respected and to be followed prior to enabling site safe, we recommend that all key actors in relation with the project bring a smooth climate for a better plan performance and ensure safety of our all workers and enhance productivity to all project beneficiaries.

## REFERENCES

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- 2.**National Institute for Occupational Safety and Health** (NIOSH)/OSHA/U.S. Coast Guard (USCG)/EPA, *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities*, Publication No. 85-115, 1985.
- 3.**Rwanda Labor Law**, No. 02 of 17/05/2012,[Art. 3-6, 7,91]
- 4.**Rwanda, Ministerial** order No. 01 of 15/01/2015 [Art. 4], regulating Occupational Safety and Health in Rwanda.
- 5.**Title 29**, Part 1910 of the Code of Federal Regulations (29 CFR 1910), *Occupational Safety and Health Standards* (with special attention to Section 120, *Hazardous Waste Operations and Emergency Response*)
- 6.**Title 29**, Part 1926 of the Code of Federal Regulations (29 CFR 1926), *Safety and Health Regulations for Construction*.
- 7.**World Bank** environmental , Health and Safety Guidelines for RoW
- 8.**Visual display units: Radiation protection guidance, Occupational Safety and Health Series, No. 70** (Geneva).
9. **Major hazard control**: A practical manual (Geneva).
10. **Safety, health and welfare** on construction sites: A training manual (Geneva).
- 12..Encyclopedia of occupational health and safety, 4th ed., 4 vols. (Geneva).
- 13.Safety in the use of radiofrequency dielectric heaters and sealers: A practical guide, Occupational Safety and Health Series, No. 71 (Geneva).
- 14.Technical and ethical guidelines for workers' health surveillance, Occupational Safety and Health Series, No. 72 (Geneva).
- 15.**Ergonomic checkpoints**: Practical and easy-to-implement solutions for improving safety, health and working conditions, rev. ed. (Geneva).

## **APPENDICES**

## APPENDIX 1: Hazard and Risks Assessment Arrangement

<i>Activity</i>	<i>Hazard (How It Happened)</i>	<i>Risk (What Happened)</i>	<i>Scoring (Low/ Medium/ High)</i>	<i>Control Measures</i>	<i>Accountable Person/Agent</i>

## APPENDIX 2: INCIDENT REPORTING FORM

**Status** :Mandatory to be available at each site

Status:	Worker <input type="checkbox"/>	Contractor <input type="checkbox"/>	Other <input type="checkbox"/>
Outcome:	<input type="checkbox"/> Near miss	<input type="checkbox"/> Person injured	<input type="checkbox"/> Property damage
Illness	<input type="checkbox"/>		

### 1. Details of involved person

Names: ..... Phone: .....

Address: .....☐. Sex: ☐ F

..... Date of birth: .....

Position: .....

Work arrangement: ☐ casual ☐ full-time ☐ part-time ☐ Other

### 2. Details of witness

Names: .....Phone: .....

Address: .....

### 3. Details of incident

Date: ..... Time: .....

Location: .....

Describe what happened and how:

.....

.....

### 4. In case of injury:

Nature of injury (e.g. cut, burn, sprain).....

Cause of injury (e.g. fall, vehicle collision).....			
Location on body (e.g. leg, left forearm).....			
Equipment involved (e.g. van, trolley).....			
<b>5. Treatment administered</b>			
First aid <input type="checkbox"/> Treated at a health facility <input type="checkbox"/> Admitted to hospital <input type="checkbox"/>			
Treatment given by (Name).....			
Treatment .....			
<b>TO BE COMPLETED BY THE EMPLOYER</b>			
<b>6. Did the injured person stop to work?</b>			
<input type="checkbox"/> Yes      No <input type="checkbox"/>			
If yes, <input type="checkbox"/> Has not returned to work			
<input type="checkbox"/> Returned to normal work		Date:	Time:
<input type="checkbox"/> Returned to work on modified duties		Date:	Time:
<input type="checkbox"/> Workers compensation claim		<input type="checkbox"/> Rehabilitation	
<b>7. Risk assessment</b>			
Likelihood of recurrence .....			
Level of risk:    High <input type="checkbox"/> Moderate <input type="checkbox"/> Low <input type="checkbox"/>			
<b>8.Actions to prevent recurrence</b>			
<i>Action</i>	<i>By whom</i>	<i>By when</i>	<i>Date completed</i>
<b>9. Action completed</b>			

Signed .....	
Position .....	Date .....
Feedback involved: ..... Date .....	



### APPENDIX 3: Injuries information data sheet

No	Article	Quantity	Brief info/Action taken
1	Number of total injured		
2	Number of Medical Injured		
3	Number of lost time injured		
4	Number of first aid injured		
5	Number of motor vehicle accidents		
6	Number of occupational diseases		
7	Number of property damage incidents		
8	Number of environmental incidents		
9	Number of public incidents		
10	Number of near let passes		
11	Number of electrical contacts		

**APPENDIX 4:Risk Management Register**

RISK MANAGEMENT REGISTER					
Project Name: EPC North					
Contractor: LUCKY EXPORTS Co., Ltd					
Contract No: _____					
Date: _____					
Major Work Activity in exercise	Potential Hazards Identified for the Activity	Task Safety Analysis is required for any activity that is a Significant Hazard – Class A or B Risk			
		YES	NO	TSA No. &	Date Produced

**APPENDIX 5: CONTRACTOR SELF-INSPECTION CHECKLISTS**

<b>EMPLOYER POSTING</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
<b>1</b>	Is the required OSH Job Safety and Health Protection Poster displayed in a prominent location where all employees are likely to see it?	
<b>2</b>	Are emergency telephone numbers posted where they can be readily found in case of emergency?	
<b>3</b>	Where employees may be exposed to toxic substances or harmful physical agents, has appropriate information concerning employee access to medical and exposure records and Material Safety Data Sheets (MSDSs) been posted or otherwise made readily available to affected employees?	
<b>4</b>	Are signs concerning exit routes, room capacities, floor loading, biohazards, exposures to x-ray, microwave, or other harmful radiation or substances posted where appropriate?	
<b>5</b>	Is the Summary of Work-Related Injuries and Illnesses OSHA Form posted during the project months	
<b>RECORDKEEPING</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
<b>6</b>	Are occupational injuries or illnesses, except minor injuries requiring only first aid, recorded as required on the OSHA form log?	
<b>7</b>	Are employee medical records and records of employee exposure to hazardous substances or harmful physical agents up-to-date and in compliance with current OSH standards?	
<b>8</b>	Are employee training records kept and accessible for review by employees, as required by OSH standards?	
<b>9</b>	Have arrangements been made to retain records for the time period required for each specific type of record? (Some records must be maintained for at least years)	
<b>10</b>	Are operating permits and records updated for items such as elevators, and other operating machines?	
<b>SAFETY AND HEALTH PROGRAM</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
<b>11</b>	Is there an active safety and health program in operation that includes general safety and health program elements as well as the management of hazards specific to this work-site?	
<b>12</b>	Is one person clearly responsible for the safety and health program?	
<b>13</b>	Is there a safety committee or group made up of management and labor representatives that meets regularly and reports in writing on activities?	
<b>14</b>	Is there a working procedure to handle on-site/in-house employee complaints regarding safety and health?	
<b>15</b>	Are your employees advised of efforts and accomplishments of the safety and health program made	

	to ensure they will have a workplace that is safe and healthful?	
16	Is there any plan for incentives for employees or workgroups who excel in reducing workplace injury/illnesses?	
<b>FIRST AND AID MEDICAL SERVICES</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
17	Is there a hospital, clinic, or infirmary for medical care near your workplace and is there at least one employee on each shift currently qualified to render first aid?	
18	Have all employees who are expected to respond to medical emergencies as part of their job responsibilities received first aid training; had hepatitis B vaccination made available to them; had appropriate training on procedures to protect them from bloodborne pathogens, including universal precautions; and have available and understand how to use appropriate PPE to protect against exposure to bloodborne diseases?	
19	If employees have had an exposure incident involving bloodborne pathogens, was an immediate post-exposure medical evaluation and follow-up provided?	
20	Are medical personnel engaged for partnership and readily available for advice and consultation on matters of employees' health?	
21	Are emergency phone numbers posted or available on-site?	
22	Are fully supplied first aid kits easily accessible to each work area, periodically inspected and replenished as needed?	
23	Have first aid kits and supplies been approved by a physician, indicating that they are adequate for a particular area or operation?	
24	Is there an eye-wash station or sink available for quick drenching or flushing of the eyes and body in areas where corrosive materials or liquids are handled?	
<b>FIRE PROTECTION</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
25	Is the local fire department familiar with your Site or facility, its location and specific hazards?	
26	Are portable fire extinguishers provided in adequate number and type and mounted in readily accessible locations and sites?	
27	Are fire extinguishers recharged regularly with this noted on the inspection tag?	
28	Are employees periodically instructed in the use of fire extinguishers and fire protection procedures?	
29	Are employees adequately trained on rescue for fire incident?	
<b>PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
30	Has the employer determined whether hazards that require the use of PPE (e.g., head, eye, face, hand, or foot protection) are present or are likely to be present?	

31	If hazards or the likelihood of hazards are found, are employers selecting appropriate and properly fitted PPE suitable for protection from these hazards and ensuring that affected employees use it?	
32	Have both the employer and the employees been trained on PPE procedures, i.e., what PPE is necessary for each job tasks, when workers need it, and how to properly wear and adjust it?	
33	Are approved safety glasses required to be worn at all times in areas where there is a risk of eye injuries such as welding, metals cutting and poles perforation or flying scratch products	
34	Are employees who wear corrective lenses (glasses or contacts) in workplaces with harmful exposures required to wear only approved safety glasses, protective goggles, or use other medically approved precautionary procedures?	
35	Are protective gloves, aprons, shields, or other means provided and required where employees could be cut or where there is reasonably anticipated exposure to corrosive chemicals, blood, or other potentially infectious materials?	
36	Are hard hats required, provided and worn where danger of falling objects exists?	
40	Are hard hats periodically inspected for damage to the shell and suspension system?	
41	Is appropriate foot protection provided where there is the risk of foot injuries from poisonous substances, falling objects, crushing, or penetrating actions?	
42	Is all PPE maintained in a sanitary condition and ready for use?	
43	Are food or beverages consumed only in areas where there is no exposure to toxic material, blood, or other potentially infectious materials or in safe and designated area?	
44	Is the drug abuse and use prohibition note posted on-site for easy restriction reminder?	
45	Is protection against the effects of occupational noise provided when sound levels exceed those of the OSH Noise standard?	
46	Are adequate work procedures, PPE and other equipment provided and used when cleaning up spilled hazardous materials?	
47	Are appropriate procedures in place to dispose of or decontaminate PPE contaminated with, or reasonably anticipated to be contaminated with, blood or other potentially infectious materials?	

#### GENERAL WORK ENVIRONMENT

S.N	Item	Status
48	Are all worksites clean, sanitary and orderly and with potable water?	
49	Are all spilled hazardous materials or liquids, including blood and other potentially infectious materials, cleaned up immediately and according to proper practices?	
50	Is combustible scrap, debris and waste stored safely and removed from the worksite promptly?	
51	Are accumulations of combustible dust routinely removed from elevated surfaces including the overhead structure of structures, lines etc.?	
52	Is combustible dust cleaned up with a vacuum system to prevent suspension of dust particles in the environment?	

<b>53</b>	Is metallic or conductive dust prevented from entering or accumulating on or around electrical enclosures or equipment?	
<b>54</b>	Are covered metal waste cans used for oily or paint-soaked waste? ( e.g: during machines, trucks and transformers recharge/discharge)	
<b>55</b>	Are all oil and other-fired devices equipped with flame failure controls to prevent flow of fuel if pilots or main burners are not working?	
<b>56</b>	Are the minimum number of toilets and washing facilities provided and maintained in a clean and sanitary fashion?	
<b>57</b>	Are all work areas adequately illuminated/well-lit?	
<b>58</b>	Are pits openings covered or otherwise guarded (Poles pits)?	
<b>59</b>	Have all confined spaces been evaluated for compliance with OSH requirements?	
<b>WALKWAYS</b>		
<b>S.N</b>	<b>Item</b>	<b>Status</b>
<b>60</b>	Are aisles and passageways kept clear and marked as appropriate?	
<b>61</b>	Is there safe clearance for walking in walkways where motorized or mechanical handling equipment is operating?	
<b>62</b>	Are materials or equipment stored in such a way that sharp projections will not interfere with the walkway?	
<b>63</b>	Are fallen materials cleaned up immediately?	
<b>64</b>	Are changes of direction or elevations readily identifiable?	
<b>65</b>	Are walkways that pass near moving or operating machinery, welding operations, or similar operations arranged so employees will not be subjected to potential hazards?	

**APPENDIX 6:Example of internal company policy**

## **Lucky Exports Drug and Alcohol Policy**

### **1. Goals**

#### ***This Strategy 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 requirements of the Rwanda Occupational Health and Safety Act and the Rwanda OSH Policy 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 LUCKY EXPORTS*

### **2. Definition**

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

### **3. Responsibilities**

*No one must drink alcohol or use drugs at this workplace.*

*The SHE manager/supervisor at all our 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 our workplace sites.*

*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 to your supervisor, who may assign you other duties or arrange for you to be removed safely from the workplace.*

### **4. Managing drugs and alcohol**

*LUCKY EXPORTS will identify and investigate 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. LUCKY EXPORTS will consult with workers, work health and safety representatives and/or the work health and safety committee on this issue.*

### **5. Disciplinary action**

*If anyone is found to breach this policy, management will be automatically suspended, and finally, dismissed.*

### **6. Social events**

*Responsible social events will be not allowed in our workplace sites and employees will be performing these events elsewhere, once will be planned as a shared event with all employees, an appropriate venue will be arranging outside the workplace site.*

**7. Information and support**

*LUCKY EXPORTS will provide regular training and information about the effects of drug and alcohol use on personal and work health and safety, and on the components of this policy.*

**Signed,  
LUCKY EXPORTS Management.**



## **APPENDIX 7: CONTRACTOR (Lucky Exports) SAFETY INSPECTION PROCEDURE**

### **1. Purpose**

To ensure that all project components perform *safety inspections* regularly and in a predictable manner.

### **2. Range of application**

This procedure applies to all safety zones at the Sites.

### **3. Responsibility**

Managers are responsible for performing safety inspections and documenting that any post-inspection actions are implemented.

### **5. Method**

Safety inspections will consist of a preliminary meeting, an inspection and a final meeting. Safety inspections will be carried out annually. Managers must take the advice of safety representatives for planning, implementation and follow-up.

### **6. Planning**

Managers shall set the date for safety inspections and invite the safety representative.

Managers shall invite other relevant personnel when needed. This can be a representative of the Technical section and/or the Occupational Health Unit. Managers shall determine whether safety inspections should include some or all project staff (Full time and part time). Managers shall inform staff when safety inspections are to be conducted.

### **7. Execution**

- **Preliminary meeting:** The manager, safety representative and any other participants shall attend preparatory meetings. The managers shall review the status of actions taken after previous safety inspections, and determine the main focus of this year's safety inspection along with other meeting participants.
- **Inspection:** The manager, safety representative and any other participants will carry out an inspection of the premises and talk to staff. (*Checklist and action plan for safety inspections* to be used).
- **Final meeting:** The manager, safety representative and any other participants shall attend the final meeting. The manager and safety representative shall summarize the findings of safety inspections and complete the checklist and action plan after input from meeting participants.

### **8. Follow-up**

The manager shall inform the staff of actions to be taken.

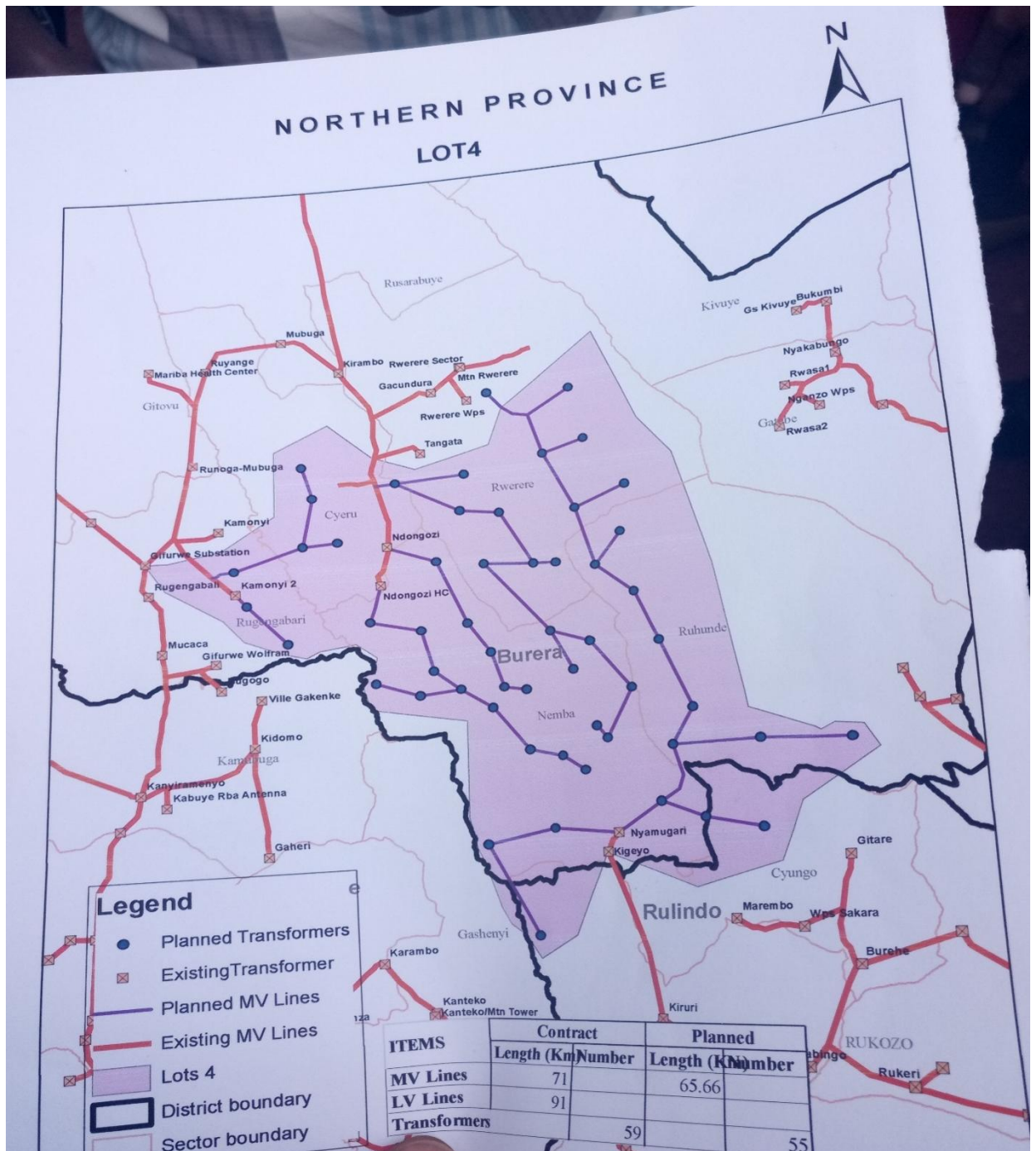
The manager must ensure that action plans are implemented.

### **9. Reporting**

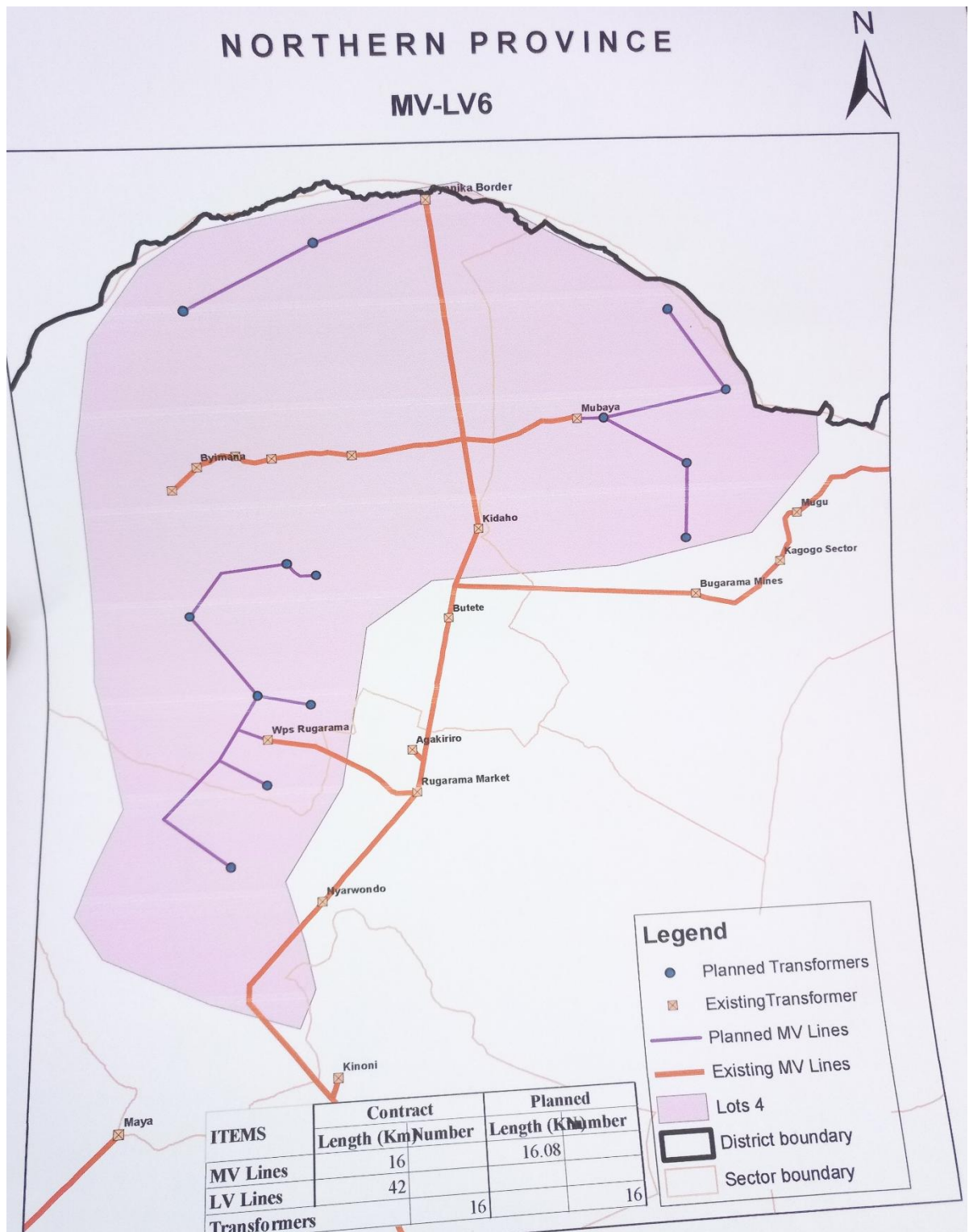
The manager shall send the safety inspection checklist and action plan to the unit board of the project and finally the full inspection report.

## APPENDIX 8: PROJECT MAP LAYOUT

### LOT 4: Burera and Rulindo Districts



# **LOT 4': Burera District**



# **LOT 8: Rubavu District**



