

**Investing in Forests and Protected Areas for Climate
Smart Development Project**

Occupational Health and Safety Measures

FINAL REPORT

November 2021

TABLE OF CONTENT

TABLE OF CONTENT	i
ABBREVIATIONS AND ACRONYMS	v
DEFINITION OF TERMS	vii
1.INTRODUCTION	1
1.1 Project Background	1
1.2 Purpose	1
1.3 Project Location	2
1.4 Scope	3
1.5 Objective	4
1.6 Applicability	4
2.PROJECT HEALTH AND SAFETY MANAGEMENT	6
2.1HEALTH AND SAFETY POLICY STATEMENT	6
2.2 ROLES AND RESPONSIBILITIES	7
2.2.1Ministry of Water and Environment (MWE)	7
2.2.2 Uganda Wildlife Authority (UWA)	7
2.2.3 National Forest Authority (NFA)	7
2.2.4 District Local Government	8
2.2.5 Project Coordination Unit (PCU)	8
2.2.5.1 Project Manager	8
2.2.5.2 Health Safety and Environment Manager	8
2.2.6 Technical Service Providers (TSP)	9
2.2.7 Community Workers	9
2.2.8 Project Management Chart	9
2.3 LEGAL AND POLICY FRAMEWORK	10
2.3.1 National Policies	10
2.3.2 National Legal Framework	10
2.3.3 International Guidelines, standards and Treaties	11
3. PROJECT SPECIFIC INFORMATION	12
3.1PROJECT HEALTH AND SAFETY GENERAL RULES	12
3.2 TRAINING AND AWARENESS	14

3.2.1 Induction training	14
3.2.2 Toolbox Talks	15
3.2.3 Visitors Induction.....	17
3.2.4 Specialized training.....	17
3.2.5 Statutory training.....	17
3.3 HEALTH AND SAFETY PROMOTION.....	17
3.3.1 Health and Safety Committee	17
3.3.2 Awards	18
3.3.3 Awareness programs.....	18
3.3.4 Health and safety Events	18
3.4 WELFARE FACILITIES	18
3.4.1 Drinking water	18
3.4.2 Washing facilities	19
3.4.4 Resting area	19
3.4.5 Provision of canteen	19
3.4.6 First aider	20
3.4.7 First aid room/ First Aid Box.....	20
3.4.8 Ambulance	20
3.4.9 Provision of changing room	20
4. OPERATIONAL CONTROLS	20
4.1 HAZARD IDENTIFICATION AND RISK MANAGEMENT.....	20
4.1.1 Hazard identification and Risk procedures	20
4.1.2 Hazard classification.....	21
4.1.3 Roles and responsibilities for Hazard Identification	22
4.1.4 Methods of hazard identification.....	22
4.1.5 Review and approval of contractors Risk assessment	22
4.1.6 Method statement.....	23
4.1.7 Risk register	23
4.2 JOB HAZARD ANALYSIS	23
4.3 PERMIT TO WORK.....	23
4.4 LOCK OUT TAG OUT TRY OUT (LOTOTO) PROCEDURE.....	24
4.5 SAFE WORKING PROCEDURES	24
4.5.1 EARTH WORKS.....	24

4.5.2	COMPACTION	28
4.5.3	DEWATERING	30
4.5.4	STEEL FIXING	31
4.5.5	FORM WORK LAYING	32
4.5.6	CONCRETING	34
4.5.7	WORKING AT HEIGHT	35
4.5.8	LADDER SAFETY	36
4.5.9	SCAFFOLD SAFETY	37
4.5.10	RIGGING AND LIFTING	40
4.5.11	HOUSE KEEPING	42
4.5.12	ENVIRONMENT PROTECTION	42
4.5.13	WASTE MANAGEMENT	42
4.5.14	HOT WORKS	44
4.5.15	GAS CYLINDER SAFETY	45
4.5.16	CHEMICAL HANDLING	46
4.5.17	FIRE SAFETY	49
4.5.18	ELECTRICAL SAFETY	50
4.5.19	COMPRESSED AIR	51
4.5.20	HANDTOOL SAFETY	52
4.5.21	PERSONAL PROTECTIVE EQUIPMENT	53
4.5.22	TRAFFIC MANAGEMENT	54
4.5.23	EMERGENCY RESPONSE PLAN	56
4.5.24	HEALTH AND SAFETY INSPECTION	58
4.6	IMPLEMENTATION OF IFPA-CD OHSM	58
4.7	MANAGEMENT OF CONTRACTORS	59
4.7.1	Contractor Kick off meeting	59
4.7.2	Contractor Mobilization	59
4.7.3	Workers recruitment	60
4.8	INCIDENT MANAGEMENT	61
4.8.1	Incident reporting	62
4.8.2	Securing the scene and attending to injured	62
4.8.3	Equipment damage and Environmental incident	62
4.8.4	Witness Statements	62

4.8.5 Report Writing	63
4.8.6 Communicating to other project stakeholders	63
4.8.7 Definition of incidents	65
4.8.8 Record keeping	66
4.9 CONSULTATION AND COMMUNICATION	66
4.9.1 Posters and banners	66
4.9.2 Signages	66
4.9.3 Observation Cards	67
4.9.4 Email	67
4.9.5 Minutes of Meeting	67
4.10 MONITORING, INSPECTION, AUDITING AND REPORTING	68
4.10.1 Health and Safety inspections	68
4.10.2 Health and Safety Audits	68
4.10.3 Project Key performance indicators	68
4.10.4 Non conformance	70
4.10.5 Health and Safety penalties	70
4.11 HEALTH AND SAFETY MEASURES REVIEW	70
4.12 PROJECT CLOSE OUT REPORT	70
4.13 IFPA-CD PROJECT BASELINE HAZARD IDENTIFICATION AND RISK ASSESSMENT	71

ABBREVIATIONS AND ACRONYMS

ALARP-As Low as is Reasonably Practicable

AIDS-Acquired Immune Deficiency Syndrome

CAPA-Corrective Action and Preventive Action Plan

CFRs-Central Forest Reserves

DOSH-Department of Occupational Safety and Health adherence

DLG -District Local Government

ESCP-Environmental and Social Commitment Plan

EHS- Environment Health and Safety

ESRS- Environmental and Social Review Summary

ESS- Environmental and Social Standards

ESMF- Environmental and Social Management Framework

ESIA- Environmental Social Impact Assessment

GBV-Gender Based Violence

GIIP-Good International Industry Practice

GoU-Government of Uganda

GRC- Grievance Redress Committee

GRM- Grievance Redress Mechanism **HIV**-Human Immunodeficiency Syndrome

IFPA-CD- Investing in Forests and Protected Areas for Climate Smart Development Project

ILO-International Labor Organization

LMP-Labour Management Plan

MoGLSD-Ministry of Gender, Labour and Social Development

MWE-Ministry of Water and Environment

MTWA-Ministry of Tourism, Wildlife and Antiquities

NFA-National Forestry Authority

NOSHP-National Occupational Safety and Health Policy

HIAT- Hazard Identification Awareness and Training

OSH-Occupational Health and Safety

OVC-Orphans and Vulnerable Children

PAD- Project Appraisal Document

PIM- Project Implementation Manual

PPE -Personal Protective Equipment

PWDs-People with Disabilities

TOR-Terms of Reference

TSP-Technical Service Providers

UWA-Uganda Wildlife Authority

WB-World Bank

WR-Wildlife Reserves

DEFINITION OF TERMS

Acquired Immuno Deficiency Syndrome (AIDS)- As defined by *The HIV and AIDs prevention and Control Act ,2004* is a condition characterized by a combination of signs and symptoms, resulting from suppression of the immune system caused by the infection with the Human Immuno-Deficiency Virus (HIV)

Casual Employee- As defined by *Employment Act 2006* means a person who works directly on a daily or hourly basis where payment or wages is due at the completion of each day's work

Chemical Substance - As defined by *OSHA 2006*, as any natural or artificial substance intended for use in any physical state whether gaseous, liquid or solid and in particular includes; pesticides, fungicides, fumigants, herbicides, wood preservatives, fertilizers, growth control chemicals, industrial chemicals, solvents, pharmaceuticals and food preservatives and food additives

Agricultural Chemicals-As defined by *Agricultural Chemicals (Control) Act, 2006* includes plant protection chemicals, fungicides, insecticides, nematicides, herbicides, miticides, bactericides, rodenticides, molluscides, avicides, fertilizer, growth regulators, wood preservatives, bio-rationals, biopesticides, bio-fertilizers or any other chemicals used for promoting and protecting the health of plants, plants products and by products

Contract of service- As defined by *Employment Act 2006* means any contract, whether oral or in writing, whether express or implied, where a person agrees in return for remuneration, to work for an employer and includes a contract of apprenticeship

Construction- As defined by *The National Environment(Noise Standards and control) Regulations,2003* includes erection, alteration, repair, dismantling, demolition, structural maintenance, painting, mowing, land clearing, earth moving, grading, excavating, laying of pipes and conduits whether above or below ground level, street and highway building, concreting ,installation and alteration of equipment, and structural installation of construction components and materials in any form or any purpose that includes any work in connection with the construction

Competent person- As defined by *OSHA 2006*, a person with suitable training and sufficient knowledge, experience and skill for the performance of specific work

Child-As defined by *National Child Policy 2020*, is any person under the age of 18 years, in accordance with the United Nations Convention on the Rights of the Child, Article 2 of the African Charter on the Rights and Welfare of the Child, and Article 257 (1) (c) of the 1995 Constitution of Uganda.

Child Labour- As defined by *National Child Policy 2020*, is Work that deprives children of their childhood, their potential and/or their dignity, is harmful to physical and mental development and/or interferes with schooling and as defined by *Children (Amendment) Act 2006*, means work that is mentally, physically, socially or morally dangerous and harmful to a child, and the circumstances under which it is performed jeopardizes the health and safety, morals and education of a child.

Child exploitation- as defined by *Children (Amendment) Act 2006*, means the employment of a child in activities from which other people derive a benefit, whether financial, sexual or political and includes activities such as child trafficking, child prostitution, child pornography and involvement of children in armed conflict

Child protection- As defined by *National Child Policy 2020*, are measures that are taken to prevent and respond to all forms of abuse, neglect, exploitation and violence against children and their rights.

Discrimination- As defined by *The HIV and AIDs Prevention and Control Act ,2004*, means an act of alienation, refusal, isolation, maltreatment, disgrace, prejudice or restriction of rights towards another person because of various aspects including HIV /AIDS, race

Disability- As defined by *National Council on Disability Act 2003*, mean permanent and substantial function limitation of daily life activities caused by physical, mental or sensory impairment and environmental barriers resulting in limited participations

Ergonomically - As defined by *MoGLSD Social, Safety and Health Safeguards Implementation Guidelines for local Government 2020* means a way that minimizes physical effort or discomfort and maximizes efficiency

Forced Labour- As defined by *Employment Act 2006* means all work or service which is extracted from any person under the threat of a penalty, including the threat of any loss of rights or privileges and for which that person has not offered himself or herself voluntarily

Health- As defined by *Occupational health and Safety Act (OSHA) 2006*, not merely the absence of disease or infirmity but includes the physical and mental elements affecting health which are indirectly or directly related to safety and hygiene at work.

Human Immuno-Deficiency Virus (HIV)- *The HIV and AIDs Prevention and Control Act ,2004*, means the virus that causes immune deficiency syndrome in humans

Hazard- As defined by *MoGLSD Social, Safety and Health Safeguards Implementation Guidelines for local Government 2020* means an object, situation or behavior that has the potential to cause injury, ill-health or damage to property or the environment

Incident- As defined by *OSHA 2006*, as unsafe occurrence arising out of or in the course of work where no personal injury is caused, or where personal injury needs only first aid treatment

Incineration- As defined by *The National Environment (Waste Management) Regulations,2020* means thermal treatment of waste with or without recovery of the combustion heat generated, including through oxidisation of carbon or material containing carbon into carbon dioxide and water, as well as other thermal treatment processes including pyrolysis, gasification or plasma processes when the substances resulting from this treatment are subsequently oxidised

Lifting appliance- As defined by *OSHA 2006*, means any pulley block, gin wheel, chain block, or set of chain blocks

Lifting gear- As defined by *OSHA 2006*, means chains, ropes, chain slings, rings, hooks, shackles, swivels, eyebolts, lifting beams and scale beams

Lifting machine- As defined by *OSHA 2006*, means a crane, crab winch, teagle, runaway, transport or forklift trucks used for raising or lowering persons or objects

Noise - As defined by *OSHA 2006*, means all sounds which may result in hearing impairment or which may be harmful to health or which is dangerous, disagreeable por undesirable

Occupational Accident- As defined by *MoGLSD Social, Safety and Health Safeguards Implementation Guidelines for local Government 2020* means an occurrence arising out of or in the course of work which results into fatal occupational injury or non -fatal occupational injury

Occupational disease- As defined by *MoGLSD Social, Safety and Health Safeguards Implementation Guidelines for local Government 2020* means a disease contracted as a result of exposure to risk factors arising from a work activity

Orphans and Vulnerable Children-As Defined by *National Orphans and other vulnerable Children policy 2004* include orphans, those who live in the streets those that toil under exploitative conditions of labour as well as those that suffer sexual abuse and other forms of discrimination

Pesticide- As defined by *Agricultural Chemicals (Control) Act, 2006* means a chemical which, by virtue of its poisonous properties is used to kill pests in agriculture and forestry

Radiation- As defined by *OSHA 2006*, means all frequencies of electro-magnetic wave spectrum including in particular microwaves, infra-red, visible and ultra-violet, x rays and also includes ionizing radiation

Reflectors- means a retro reflector which has no light source of its own and reflects light back to its source

Safe working load- As defined by *OSHA 2006*, means a load specified in a certificate of test obtained from a manufacturer or issued by an authorized person

Smoking- As defined by *the Tobacco Control Act 2015* means possessing or controlling a lit or heated tobacco product regardless of whether the smoke is actively inhaled or exhaled

Toolbox talks - As defined by *MoGLSD Social, Safety and Health Safeguards Implementation Guidelines for local Government 2020* means safety meetings conducted at the job site prior to commencement of a job or work shift

Toxic Chemical- As defined by *Toxic Chemical and Prohibition Control Act 2016* means any chemical which through its chemical action on life processes can cause death, temporary incapacitation or permanent harm to humans or animals and includes all chemicals, regardless of

their origin or method of production, and regardless of whether they are produced in facilities, in munitions or elsewhere

Waste management - As defined by *The National Environment (Waste Management) Regulations, 2020* means activities relating to the collection, transportation, storage, treatment and disposal of waste, including the management of waste at source and during decommissioning of waste management facilities

Workplace- As defined by *MoGLSD Social, Safety and Health Safeguards implementation Guidelines for local Government 2020* means All places of work and all sites and area where work is carried out

1.INTRODUCTION

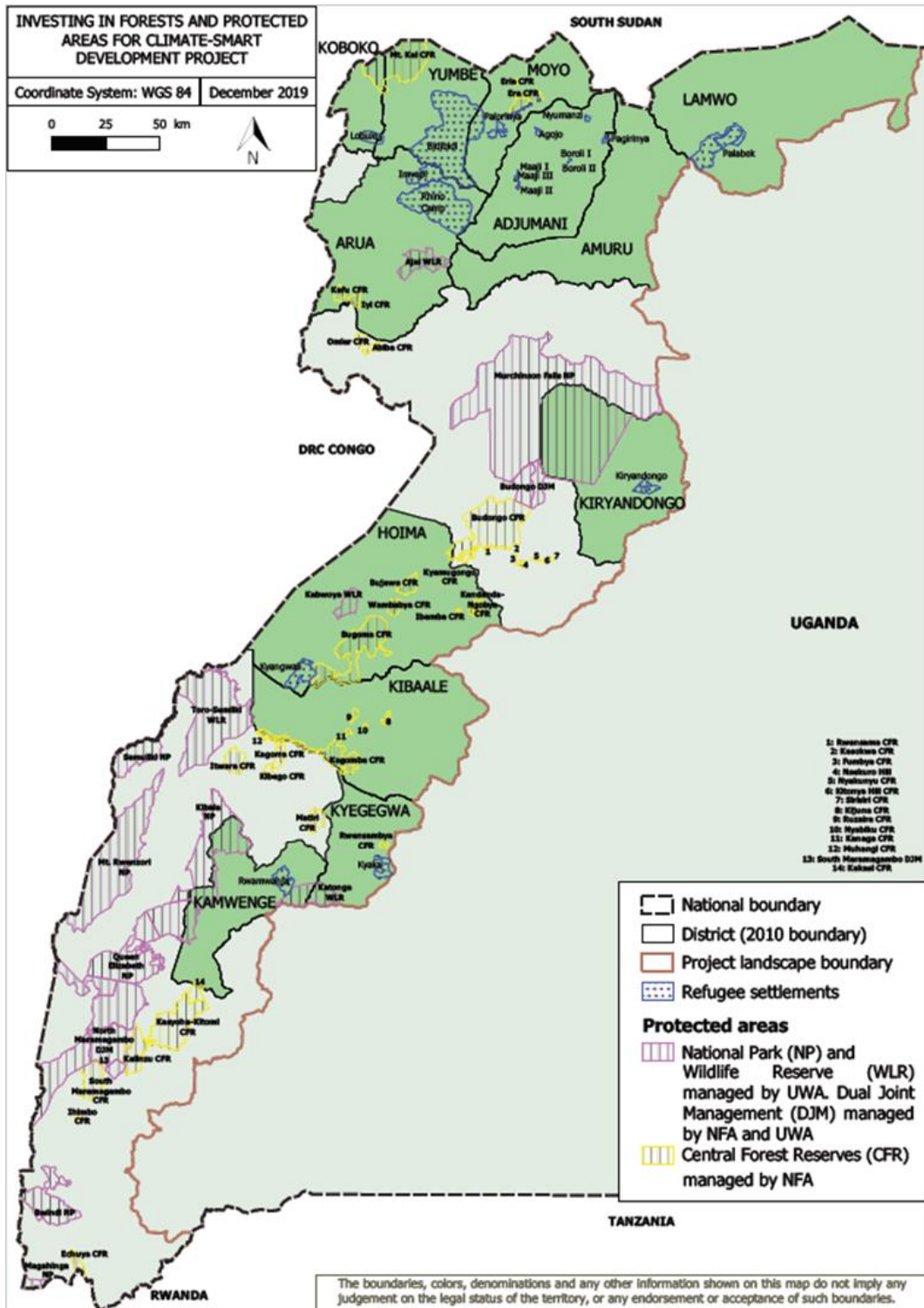
1.1 Project Background

Investing in Forests and Protected Areas for Climate Smart Development (IFPA-CD) Project is financed by the International Development Association (World Bank/IDA) and the Government of Uganda (GoU). The project is jointly developed and implemented by the Ministry of Water and Environment (MWE), National Forestry Authority (NFA) and Uganda Wildlife Authority (UWA) in close collaboration with the Ministry of Tourism Wildlife and Antiquities (MTWA) and the office of the Prime Minister (OPM) with support from World Bank. IFPA-CD **project comprises of** four major components including Investments to improve the management of forest and protected areas; Investments to increase revenues and jobs from forests and wildlife protected areas; Improved tree cover, forest management and landscape resilience on private and customary land including refugee hosting areas; and project management and monitoring that shall be implemented by various lead agencies including NFA, UWA and MWE. The project seeks to improve sustainable management of forests and protected areas and increase benefits to communities from forests in targeted land scape. The project will be implemented in selected sites in the Albertine Rift and the refugees hosting areas of West Nile region and Lamwo District with focus on targeted Protected areas including 7 National Parks (NP),4 Wildlife Reserves (WR),28 Central Forest Reserves (CFR) and 18 refugee host districts.

1.2 Purpose

The project Occupational Health and Safety Measures aim to provide guidelines on how work will be executed during implementation of IFPA-CD Project to ensure that health and safety of the workers are adequately managed to prevent injuries and loss of lives during the course of employment. Occupational Health and Safety Measures has been developed in a manner consistent with the World Bank's Environmental and Social Standard(ESS) 2 on Labour and working conditions in addition to relevant GoU legal and regulatory framework, World Bank Group General Environmental Health and Safety Guidelines (WBG EHS Guidelines), International Labour Organisation Conventions and other Good International Industry Practices.

1.3 Project Location



1.4 Scope

The IFPA-CD Project's Occupational Health and Safety Measures set the minimum requirements that are to be met by the contractors during their execution of assigned scope of work. The measures shall be implemented in IFPA-CD project to ensure the health and safety of the workers is safeguarded by adhering to the safe working procedures and the control measures outlined in the project baseline hazard identification and risk assessment. During project implementation the following activities shall be undertaken by various contractors at various locations including:

- 1) Grading and maintenance of tracks and trails within protected areas to improve access for park management in forest protected areas.
- 2) Boundary planning and demarcation in forest protected areas.
- 3) Infrastructure including gates and fences in forest protected areas.
- 4) Equipment and activities to manage human wildlife including trenches and fences in forest protected areas.
- 5) Investment in rangers housing, communications, vehicle and equipment in forest protected areas
- 6) Natural regeneration and Enrichment planting through engaging and employing local communities for the restoration of degraded natural forests and habitats in the forest reserves
- 7) Community livelihood activities including beekeeping and wild mushroom growing to protect forests in CFRs and WRs in close proximity to refugee settlements
- 8) Removal of invasive species to protect forests in CFRs and WRs in close proximity to refugee settlements
- 9) Forest restoration to protect forests in CFRs and WRs in close proximity to refugee settlements
- 10) Improvement of basic protected area management including communication and other equipment, vehicle, ranger post, essential infrastructure in CFRs and WRs in close proximity to refugee settlements
- 11) Construction of fire observation towers and provision of equipment for improved wildlife management in CFRs and WRs in close proximity to refugee settlements
- 12) Boundary demarcation for increased forest protection in CFRs and WRs in close proximity to refugee settlements

- 13) New infrastructure or improving existing tourism products and activities
- 14) Intensive, mixed use agroforestry systems on household plots towards establishment of greater tree cover in refugee hosting landscapes outside protected areas
- 15) Support woodlots on private land towards establishment of greater tree cover in refugee hosting landscapes outside protected areas
- 16) Natural forest management on customary, leasehold, and freehold land through support to establishment of community forest and implementation of activities within them towards establishment of greater tree cover in refugee hosting landscapes outside protected areas
- 17) Support services for district local governments through capacity building, provision of basic packages of office equipment, for mobility and operational costs towards establishment of greater tree cover in refugee hosting landscapes outside protected areas
- 18) Setting up program to purchase fuel wood from communities and supply it to refugees as a way of supporting farm forestry for refugee fuel supply
- 19) Project management support to ensure cost efficiency, timely and quality delivery of IFPA-CD project activities and results

1.5 Objective

The aim of the occupational health and safety measures are to ensure that IFPA-CD project will be executed with zero incidences. Objectives of the project Occupational Health and Safety Measures include:

- 1) To identify the hazards and risks in execution of IFPA-CD project
- 2) To adequately manage the hazards and risks involved in execution of IFPA-CD project
- 3) To prevent ill health and injury of the contractors in execution of IFPA-CD project
- 4) To build capacity of stakeholders on health and safety matters in IFPA-CD project
- 5) To ensure IFPA-CD project is undertaken in compliance to GoU legislation and World Bank EHS guidelines
- 6) To evaluate and monitor progress on occupational health and safety in IFPA-CD project

1.6 Applicability

The project Occupational Health and Safety Measures shall apply to all parties involved in the IFPA-CD Project including the Project Coordination Unit (PCU) staff who are hired under contract to the project for the duration of the project implementation; contracted workers including

firms/Technical Service Providers(TSP), Non-Governmental Organizations (NGOs) will use existing staff already on the payroll; short-term consultants; community workers, Government civil servants and any other authorised person including visitors and suppliers. All stakeholders shall be required to abide by the Occupational Health and Safety Measures. Where the GoU regulations differ from the levels and measures presented in the World Bank EHS Guidelines IFPA-CD project shall achieve whichever is more stringent.

2.PROJECT HEALTH AND SAFETY MANAGEMENT

2.1HEALTH AND SAFETY POLICY STATEMENT

IFPA- CD PROJECT OCCUPATIONAL HEALTH AND SAFETY POLICY STATEMENT

Ministry of Water and Environment recognizes the importance of health and safety management in the IFPA-CD project and shall endeavor to ensure the project is executed with zero incidences of injuries and ill health. The Ministry of Water and Environment in collaboration with National Forest Authority and Uganda Wildlife Authority through IFPA-CD Project Coordination Unit shall be committed to proactively and continuously offer leadership and guidance to ensure that the health and safety of workers is safeguarded. With this regard the Project Coordination Unit shall endeavor to:

- 1) Ensure a safe work place all stakeholders in the IFPA-CD project through training and awareness of project hazards and risks
- 2) Meet legal requirements for occupational health and safety as a minimum throughout IFPA-CD project
- 3) Provide adequate resources and support to ensure set objectives are met on a timely manner
- 4) Consult other project stakeholders on occupational health and safety when required and consider their input in decision making
- 5) Continuously monitor and review Occupational Health and Safety performance to ensure all processes and procedures are effective towards realization of a safe workplace
- 6) Review and make improvements where necessary with the aim of improving Occupational Health and Safety performance

MANAGER

2.2 ROLES AND RESPONSIBILITIES

The Occupational Health and Safety Measures shall be comprehensively outlined in the training program that will be disseminated to the project Stakeholders prior to commencement of IFPA_CD project.

2.2.1 Ministry of Water and Environment (MWE)

- 1) Responsible for project accountability, oversight, and implementation
- 2) Hire direct Project workers of the PCU under contract for the duration of the project implementation
- 3) Ensure all contracts adhere to the national Labour legislation
- 4) Engage District Labour Offices (DLO) in monitoring compliance with Labour Laws.
- 5) Responsible for Contractor site/field supervisors
- 6) Responsible for daily monitoring of activities to ensure compliance to set legislation and the project Labour Management Procedures
- 7) Responsible for ensuring that workers are appropriately trained and will serve as a primary contact point for workers grievances.

2.2.2 Uganda Wildlife Authority (UWA)

- 1) Ensure all contracts adhere to the national Labour legislation
- 2) Engage District Labour Offices in monitoring compliance with Labour Laws.
- 3) Responsible for Contractor site/field supervisors
- 4) Responsible for daily monitoring of activities to ensure compliance to set legislation and the project Labour Management Procedures
- 5) Responsible for ensuring that field staff are appropriately trained and will serve as a primary contact point for workers grievances.

2.2.3 National Forest Authority (NFA)

- 1) Ensure all contracts adhere to the national Labour legislation
- 2) Engage District Labour Offices in monitoring compliance with Labour Laws.
- 3) responsible for Contractor site/field supervisors
- 4) responsible for daily monitoring of activities to ensure compliance to set legislation and the project Labour Management Procedures

- 5) responsible for ensuring that workers are appropriately trained and will serve as a primary contact point for workers grievances.

2.2.4 District Local Government

Shall ensure that

- 1) IFPA_CD project compliance with Labour Laws
- 2) Offer advice and guidance by identifying areas of improvement

2.2.5 Project Coordination Unit (PCU)

2.2.5.1 Project Manager

Shall ensure that:

- 1) The safety Measures are fully implemented by the contractors and shall monitor Health & Safety throughout the project.
- 2) To establish and maintain a direct line of communications with the contractors on health and safety
- 3) To ensure that the contractors have undertaken comprehensive risk assessment
- 4) To ensure that where significant risks are identified suitable procedures are developed to control them
- 5) To ensure suitable arrangements are in place to control contractors' activities to ensure that they execute work in accordance with clients' requirements and relevant safety legislation
- 6) Ensure adequate resources are available for the planning and implementation of the Occupational Health and Safety Measures
- 7) Participate in planned health and safety Audits and incident investigation where applicable
- 8) Chair health and safety committee

2.2.5.2 Health Safety and Environment Manager

Shall ensure that:

- 1) Ensure implementation of the Occupational Health and Safety Measures during project duration
- 2) Develop, review of health and safety policies, procedures and measures

- 3) Coordinate all health and safety reports by coordinating with the contractor's health and safety representatives
- 4) Ensure that all incidences are reported and investigated by the contractors
- 5) Prepare monthly project health and safety report for the client
- 6) Liaise with relevant government agencies with respect to health and safety issues and concerns
- 7) Coordinate with other project departments to ensure that health and safety is integrated in the planning and execution of work.

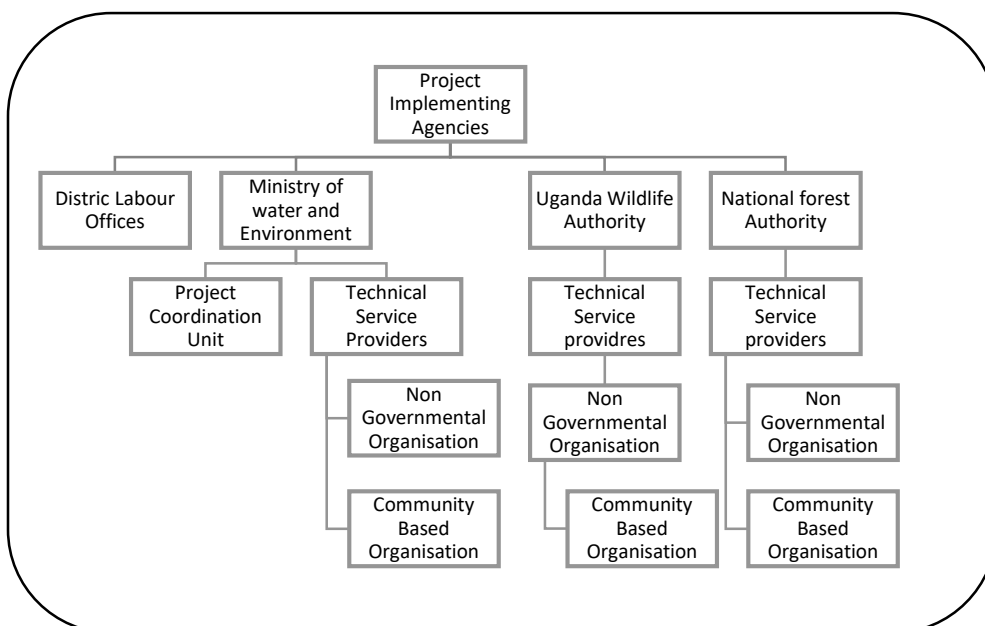
2.2.6 Technical Service Providers (TSP)

TSP are directly hired contractors by the Project Implementing Agencies (PIAs). The TSP will include firms, non-governmental organizations (NGOs) or community-based organizations (CBOs) who will use existing staff already on the payroll

2.2.7 Community Workers

Community workers will also be employed under the project and shall be made aware of the Occupational Health and safety measures. The community workers will be required to comply with the measures. They will also be required to report on time of any situation that may result to incidents to their supervisors for corrective actions to be initiated on time.

2.2.8 Project Management Chart



2.3 LEGAL AND POLICY FRAMEWORK

2.3.1 National Policies

- 1) Compressed gas cylinder safety guidelines at Workplaces,2021
- 2) National Child Policy, 2020
- 3) National Child Labour Policy,2006
- 4) The Orphans and Vulnerable Children policy 2004
- 5) Uganda National Policy on HIV&AIDs and the World of work ,2007
- 6) The National Gender Policy,2007
- 7) The National Action Plan on Gender Based Violence (GBV),2016
- 8) National Employment Policy for Uganda,2011
- 9) National Industrial Policy, 2008
- 10) Social, Safety and Health safeguards implementation Guidelines for local government,2020
- 11) National policy on Disability,2006
- 12) National Equal Opportunities Policy 2006

2.3.2 National Legal Framework

- 1) The Constitution of the Republic of Uganda,1995
- 2) Occupational Safety and Health Act 2006
 - *Occupational Safety and Health (Safety and Health Committees) Regulations,2004*
 - *Occupational Safety and health (Plant Examination and registration Fees) Regulations,2014*
 - *The Factories (Building Operations and Works of Engineering Construction) (Safety and Health) Special Rules*
- 3) The Employment Act,2006
 - *The Employment (Sexual Harassment) Regulations,2012*
- 4) The National Environment Act,2019
 - *The National Environment (Noise Standards and Control) Regulations, 2003*
 - *The National Environment (Waste Management) Regulations,2020*

- *The National Environment regulations (Control of Smoking in Public Places) Regulations,2004*
- 5) Agricultural Chemicals (Control) Act,2006.
- 6) Public Health Act Cap 281
 - *Public Health (Building) Rules*
- 7) Workers' compensation Act, 2000
- 8) Building control Act 2013
 - *The Building Control Regulations, 2020*
- 9) The Refugee Act 2006
 - *The Refugees Regulations, 2010*
- 10) Children Act Cap 59
- 11) The HIV/AIDS Prevention and Control Act,2014
- 12) Mental Health Act 2018
- 13) The Prevention of Trafficking in Persons Act ,2009
- 14) The Traffic and Road Safety Act 1998
 - *The Traffic and Road Safety (Driving Permits) Regulations,2005*
 - *The Traffic and Road Safety (Reflectors) Regulations, 2012*
 - *The Traffic and Road Safety (Prescribed Alcohol Limit) Regulations, 2004.*
- 15) The National Council for Disability Act 2003
- 16) The Narcotic drugs and Psychotropic Substances (Control) Act, No.3 of 2016
- 17) Tobacco Control Act, 2015
- 18) Local Government (Amendments) Act ,2010
- 19) The Penal Code Act

2.3.3 International Guidelines, standards and Treaties

- 1) Environment, Health and Safety General Guidelines,2007
- 2) World Bank Environmental and Social framework for Investment Project Financing, 2016
- 3) World Bank Environmental Social Standards (ESS),2018
- 4) ILO Convention 111 on Discrimination (Employment and Occupation)1958 2nd June 2005

- 5) ILO Convention 138 on Minimum age (of Employment) ,1973 Ratified 28th March 2003
- 6) ILO Convention 29 on Forced Labour ,1930 Ratified 4th June 1963
- 7) ILO Convention 105 on Abolition of Forced Labour,1957 Ratified 4th June 1963
- 8) ILO Convention 182 Worst forms of child labour,1999 Ratified 21st June 2001
- 9) ILO Convention 87 on Freedom of Association and Protection of the Right to organize,
1984.Ratified 2nd June 2005
- 10) ILO Convention 100 on Equal Remuneration 1951 Ratified 2nd June 2005
- 11) ILO Convention 81 Labour Inspection, 1947.ratified 4th June 1963
- 12) ILO Convention 122 employment Policy, 1964.ratified 23rd June 1967
- 13) ILO Convention 019 Work men's compensation (Accidents), 1925.ratified 4th June 1963
- 14) ILO Convention 158 on Termination of Employment, 1982 ratified 1985
- 15) The UN Convention on the Rights of the Child (UN) (1989) ratified by Uganda in 1990
- 16) United Nations Guideline No. 5 for People Living with HIV/AIDS
- 17) The African Charter on Human and People's Rights 1986
OAU Convention Governing the Specific Aspects of Refugee Problem In Africa,1969

3. PROJECT SPECIFIC INFORMATION

3.1 PROJECT HEALTH AND SAFETY GENERAL RULES

- 1) All workers, visitors, suppliers and any other personnel accessing the site must undergo health and safety induction. This shall be the responsibility of the contractors.
- 2) All visitors shall be required to report to respective contractor site office
- 3) Mandatory PPEs shall constitute helmet, high visibility vest and safety boots
- 4) The IFPA-CD project will be a drug and alcohol-free area, disciplinary actions will be meted on those found to be in violation.
- 5) Where there is reasonable suspicion of intoxication there shall be to test to verify
- 6) Smoking shall be done at designated smoking zones only and no person shall be permitted to smoke in offices, resting areas, eating areas and toilets
- 7) Firearms and weapons shall not be allowed within the precinct of project area
- 8) Possession and distribution of pornographic material, engaging in sexual activity regardless of whether it is consensual within the project precinct is prohibited

- 9) No person shall allow or facilitate entry of a person below the age of eighteen years on the project
- 10) Hunting of wild animals is prohibited and care shall be taken to ensure that all wild animals encountered during the project execution are relocated to safe areas or returned to their habitats where they might have strayed from
- 11) All employees shall observe mutual respect among themselves, fighting and verbal abuse are prohibited
- 12) Any form of prejudice including racial, gender, religion, disability and tribal are prohibited and will not be tolerated
- 13) Housekeeping shall be the responsibility of all and care shall be taken to avoid littering and disorderly storing of equipment and materials
- 14) All access shall be kept free from obstruction at all times to avoid trips and falls
- 15) Mobile phone shall only be allowed when one is stationary and positioned in a safe area away from work activity
- 16) All employees are shall undertake only duties assigned to them after all the hazards and risk have been communicated
- 17) Manual Handling shall be undertaken with due consideration to the weight of load and shall be avoid when mechanical handling option is available
- 18) Ladders shall be used for access and light tasks with short duration of at most 30 minutes, ladders shall not be used as a substitute for working platforms
- 19) All works requiring prior training and certification shall not be undertaken by unskilled workers including welding, driving, operation of equipment, electrical and chemical handling
- 20) Eye contact shall be initiated with the driver or operator before approaching a work area. Blind spot shall be avoided
- 21) All diesel and petroleum refueling shall be undertaken in authorized pumps. In case of small storage shall be done in metallic containers
- 22) All employees shall be required to familiarize themselves with the emergency procedures in place
- 23) All workers shall be required to report incidences immediately they happen
- 24) Engaging in practical jokes and hose play shall be prohibited

25) All welfare facilities are to be kept clean and properly utilized

3.2 TRAINING AND AWARENESS

3.2.1 Induction training

All personnel accessing IFPA-CD project site shall be taken through health and safety induction. The PCU shall ensure that safety Induction is conducted and documented. The induction program shall be reviewed from time to time and cover among others:

- 1) Project location
- 2) commitment to health and safety
- 3) goal and objective on Occupational Health and Safety measures
- 4) policy on health and safety
- 5) OSH laws and regulations and related Government of Uganda legislation
- 6) Employer responsibility to health and safety
- 7) Employee responsibility to health and safety
- 8) Scope of ongoing work
- 9) Hazards, risks and control measures
- 10) Hierarchy of hazard control
- 11) Training on use of Personal Protective Equipment
- 12) General health and safety rules for the project
- 13) Location on welfare facilities
- 14) Waste management procedures
- 15) Road and transport Safety
- 16) Emergency Action Plan, evacuation routes and contacts
- 17) HIV/AIDs
- 18) Alcohol, Drug and Substance Abuse
- 19) Violence and Harassment

All attendees shall be required to input their details in an attendance form and signed as proof of attendance. The form shall be kept as documented information. Minimum details to be captured on the form include:

- 1) Date of induction
- 2) Personnel conducting induction

- 3) Full names
- 4) Work designation
- 5) Identification number
- 6) Signature

The contractor shall be required to provide:

- 1) A room for induction equipped with a projector and provided with seats.
- 2) A health and Safety Induction shall take at least a minimum of one and a half hours
- 3) An oral assessment to check workers' understanding of the health and safety induction
- 4) Proof of workers having attained the age of eighteen years, no worker under the age of eighteen years will be engaged in the project
- 5) Medical examination certificate prior to commencing work at site. This will ensure that the worker will be declared fit to work on site and compensation claims lodged have to be proved they occurred at work place.
- 6) After induction the contractor shall issue the worker with a badge indicating name of employee, designation, induction date and expiry date. Employees shall be required to have the identification badge at all times and present it upon request by the PCU team or any other team

3.2.2Toolbox Talks

The contractor shall ensure toolbox talks are conducted before commencement of work and shall be relevant to the hazards and risks associated with planned works. The toolbox talks (TBT) shall take utmost 15 minutes and a record of the workers in attendance shall be recorded in the Toolbox signing template. Workers shall be required to write their names, designation and append their signature as confirmation of attendance. The contractor shall be required to keep the record of Toolbox talks attendance. The contractor shall develop a toolbox matrix to cover the scope of works which shall include but not limited to:

- 1) Accident prevention
- 2) Attitude and Behaviour
- 3) Avoiding electrical shock
- 4) Acetylene safety
- 5) Back injury prevention

- 6) Basic Machine safety
- 7) Carelessness
- 8) Chemical Safety
- 9) Confined space entry and dangers
- 10) Common causes of accidents
- 11) Crane operation dos and don'ts
- 12) Drug and Alcohol
- 13) Excavation safety
- 14) Eye injury and protection
- 15) Fall prevention
- 16) Flagging procedures
- 17) Hazardous substances
- 18) Flammable substances
- 19) Hand tool safety
- 20) Hazard awareness
- 21) Hazard recognition
- 22) Heat disorders
- 23) Hearing protection
- 24) Heavy Equipment safety
- 25) Housekeeping
- 26) Hygiene
- 27) HIV/AIDS
- 28) Oxygen safety
- 29) Personal protective Equipment
- 30) Powered tool safety
- 31) Sexual Harassment
- 32) Sling inspection
- 33) Welding and cutting
- 34) Wellbeing

3.2.3 Visitors Induction

All visitors shall be required to report to the site office where they will be taken through induction before being allowed entry to site. The visitor's induction shall be brief with the visitor accompanied by contractor representative from management

3.2.4 Specialized training

This shall be undertaken on a specific group of workers exposed to a particular risk including drivers and operators, electricians, scaffolders, excavation worker force, working at height workforce, Hazardous chemical handling and use and welders

3.2.5 Statutory training

All statutory training shall be undertaken as outlined in the relevant laws

3.3 HEALTH AND SAFETY PROMOTION

3.3.1 Health and Safety Committee

The contractor shall establish a Health and safety committee if the workplace has at least twenty employees in compliance with Section 16 of OSHA 2006. This shall be done within six months from the time of occupying a registered workplace. The contractor shall facilitate establishment of a Health and safety committee by permitting safety committee members time with pay during working hours as shall be necessary to undertake their responsibilities and training. The health and safety committee members shall be expected to carry out their mandate as outlined in The Occupational Safety and Health (Safety and Health Committees) Regulations, 2014 including:

- 1) To investigate potential hazards and dangerous occurrences at the workplace and to examine the causes of accidents at the workplace
- 2) To investigate complaints by an employee relating to that employee's health, safety or welfare at work
- 3) To make representations to the employer on matters arising out of 1 and 2
- 4) To make representations to the employer on general matters affecting the health, safety or welfare of the employees at the workplace
- 5) To carry out inspections in accordance with OSHA 2006.

The health and safety committee shall also when required Liaise with the Grievance Redress Committee (GRC) which is established under the Grievance Redress Mechanisms to ensure that

any issue impacting on the safety and health of the workers is addressed on a timely basis and that adequate information is provided to other stakeholders. Provision of a Health and safety committee member to sit in the GRM will be suitable to ensure that all matters with regard to health and safety are addressed.

3.3.2 Awards

The PCU shall come up with innovative award programs on health and safety during the project duration as a way of motivating the different contractors and workers to proactively participate in health and safety management. The incentive program shall include but not limited to Health and safety slogan competition among contractors or workers

3.3.3 Awareness programs

The contractor shall plan health and safety awareness programs on the various health and safety topics at an agreed interval.

3.3.4 Health and safety Events

The Project Coordination Unit team shall lead in celebrating world Day Safety and Health that are marked worldwide on the 28th April every year among other events related to health and safety. The theme of the day shall be aligned to the project as a way of creating awareness on health and

3.4 WELFARE FACILITIES

The contractor shall ensure that adequate and appropriate welfare facilities are provided at the work place. They are to be maintained in a clean and hygienic condition to guard against injury and ill health that may result due to inadequate management.

3.4.1 Drinking water

The contractor shall provide wholesome water to the employees in accordance to OSHA 2006 section 50 ensuring constant and adequate supply. The contractor shall ensure:

- 1) Water container with a lid is elevated from ground and cleaned on a monthly basis.
- 2) Water to be tested annually or in case of a contracted water provided a certificate will be presented
- 3) Signage is fixed on the tank to inform employees of the designated drinking water points”

DRINKING WATER”

- 4) All other stored water that is not safe for drinking shall be a fixed with a signage alerting workers of the same” **NOT SAFE FOR DRINKING**”

3.4.2 Washing facilities

The contract shall set up adequate washing facilities for the workers as requires in OSHA 2006 section 51 where applicable and shall have adequate, lighting, ventilation and drainage. The washing facilities will ensure that workers handling chemicals including pesticides, paints and solvents have washed off the chemicals to prevent them from carrying them home where children and other personnel could be exposed. Appropriate signage shall be posted for ease of identification.

3.4.3 Sanitary facilities

The contractor shall set up adequate cloakrooms for the workers as required in OSHA 2006 section 52. The contractor shall arrange for mobile toilets to be availed at workplace giving consideration to gender. In addition, the female toilets shall be provided with sanitary bins to ensure safe disposal of sanitary towels. The latrines and urinals shall be maintained in a clean and hygienic condition by regular cleaning and disinfection. Hand washing area shall also be provided with water and soap to ensure proper hand hygiene is observed. Appropriate signage shall be posted for ease of identification.

3.4.4 Resting area

The contractor shall provide suitable rest areas where the workers shall retreat during breaks from work in accordance with section OSHA 2006 section 53. The area shall be adequately maintained by cleaning and provision of waste bins to guard against littering. Smoking shall be prohibited in designated resting area. Appropriate signage shall be posted for ease of identification.

3.4.5 Provision of canteen

The contractor shall endeavor to provide suitable areas where workers shall retreat and take meals. Eating and drinking shall be prohibited in work areas and especially where chemicals are stored or used. Appropriate signage shall be posted for ease of identification.

3.4.6 First aider

The contractor shall employ a competent person as outlined in Rule 3 of the Factories Act Cap 220 (First Aid Personnel) Rules statutory instrument 162 Of 1971. The contractor shall ensure its validity and the certificate is to be renewed every three years

3.4.7 First aid room/ First Aid Box

The contractor shall give priority to provide a first aid room or a room capable of being used for the purpose of administering first aid. Where a first aid room is not feasible due to the transitory nature of work a first aid box shall be provided. Appropriate signage shall be posted for ease of identification.

3.4.8 Ambulance

The contractor shall provide an ambulance where feasible or have contacts to a health facility adequately equipped to handle occupational injuries and ill health cases. This arrangement will ensure prompt response for the rescue and referral of workers that will be critically injured in the course of project execution. Appropriate signage shall be posted for ease of identification.

3.4.9 Provision of changing room

The contractor shall provide workers with a suitable room where they can change from personal to work clothes. The room should have adequate lighting and provision for hanging clothes. Consideration shall be given to gender thus the contractor shall be required to provide separate changing room. Appropriate signage shall be posted for ease of identification.

4. OPERATIONAL CONTROLS

4.1 HAZARD IDENTIFICATION AND RISK MANAGEMENT

4.1.1 Hazard identification and Risk procedures

Hazard can be defined as potential for harm often associated with a condition or activity that, if left uncontrolled, can result in an injury or illness while risk is the likelihood that a worker may be harmed or suffer adverse health effects if exposed to a hazard. Hazards associated with a particular job are either inherent i.e., present before the worker starts the job or created by the work. Hazard identification is a critical process as it seeks to anticipate and recognize situations that have potential to cause harm. It will be the responsibility of the contractor to ensure that the hazard identification and risk assessment is communicated to the workers, reviewed from time to time to

ensure it is adequate and comprehensive. The process shall be undertaken by looking at the environment, equipment and materials used.

Risks associated with the hazards shall be assessed in terms of the likelihood and severity. The contractor shall define risks tolerability matrix in order to determine whether risks that are tolerable. This will ensure that the controls adopted are robust enough to reduce the risk to acceptable levels. Personal protective equipment and administrative controls will be used to manage the residual risk.

4.1.2 Hazard classification

- 1) **Biological hazards** Include viruses, bacteria, insects, animals, etc., that can cause adverse health impacts. For example, mould, blood and other bodily fluids, harmful plants, sewage, dust and vermin.
- 2) **Chemical hazards** Hazardous substances that can cause harm. These hazards can result in both health and physical impacts, such as skin irritation, respiratory system irritation, blindness, corrosion and explosions.
- 3) **Physical hazards** Environmental factors that can harm an employee without necessarily touching them, including heights, noise, radiation pressure, heat, cold and vibration
- 4) **Ergonomic hazards** Result of physical factors that can result in musculoskeletal injuries. For example, a poor workstation setup in an office, poor posture and manual handling.
- 5) **Psychosocial hazards** Include those that can have an adverse effect on an employee's mental health or wellbeing. For example, sexual harassment, victimization, stress and workplace violence.

The contractor shall adhere to the hierarchy of hazard control with priority given to eliminating the hazard where applicable. Where elimination is not possible other control measures shall be adopted single handedly or in combination including substitution, engineering controls, administrative control and personal protective equipment

- 1) **Elimination** The most effective method. This can include elimination the need to work at height by providing cleaning brooms with elongated handles
- 2) **Substitution** Involves the replacing something that produces a hazard with one that does not produce a hazard for example using of less hazardous cleaning agents. To be an effective control, the new product must not produce another hazard

- 3) **Engineering Controls** They do not eliminate the hazard but rather isolate people from the hazards. Engineering costs tend to be high but are long-term and reduce future costs. An example is building a working platform at height rather than using fall restraint and fall protection equipment
- 4) **Administrative Control** They do not eliminate the hazard but seek to prevent workers exposure to the hazard. Their effectiveness relies on workers behaviour and include work procedures, training and installing signages. An example is performing daily inspections on equipment before use
- 5) **Personal Protective Equipment** This is the least effective means of hazard control. They include hand gloves, respirators, helmets, eye protection, ear protection, high visibility clothing and safety foot ware. While purchasing Personal Protective equipment consideration will be given to their efficiency and ease of use and whether they can be used together with others.

4.1.3 Roles and responsibilities for Hazard Identification

- 1) The contractor shall ensure that all roles and responsibilities in the development, implementation and supervision of the hazard identification are assigned.
- 2) The supervisor of works shall ensure that work is undertaken with the controls in place
- 3) All workers shall be required to abide by the control measures outlined

4.1.4 Methods of hazard identification

The contractor shall identify hazards by

- 1) Reviewing the method statement
- 2) Undertaking Job safety Analysis
- 3) Informal and formal observation
- 4) Incident/Accident Analysis
- 5) Safety inspection
- 6) Consulting with workers representative

4.1.5 Review and approval of contractors Risk assessment

The contractor shall submit through the implementing agency to the PCU team through the implementing agency the hazard identification and risk assessment for approval

4.1.6 Method statement

The contractor shall submit through the implementing agency to the PCU team through the implementing agency a detailed method statement of how their scope of work will be implemented.

This shall comprise of:

- 1) Title of the work to be executed
- 2) Human resource required
- 3) Equipment and tools required
- 4) Hazards and risk with control measures to be adopted

4.1.7 Risk register

The contractor shall be required to keep a register of all the hazard identification and risk assessments conducted and produce upon request by the GOU inspector or the PCU.

4.2 JOB HAZARD ANALYSIS

A Pre-Job Task Analysis entails the identification of the various tasks involved in a given job, identifying the hazards involved in each of the tasks and recommending control measures for eliminating or controlling the hazards. A Pre-Task Safety Analysis will be undertaken prior to the scheduled work to allow time for adequate planning ensuring that all the hazards identified have been eliminated or controlled to an acceptable level. The contractor shall plan and ensure a pre job Task analysis is undertaken with emphasis placed on the high-risk activities.

4.3 PERMIT TO WORK

The contractor shall be required to adhere to the permit to work system developed for the project for routine and non-routine high-risk activities.

The permit to work system shall include but not limited to:

- Clear identification of who shall authorize particular jobs
- Who shall be responsible for specifying precautions?
- Training and instruction for permit to work
- Identification of works requiring a permit to work
- Monitoring and evaluation of the permit to work system

The works shall include but not limited to:

- Hot works
- Excavation
- Electrical works
- Confined spaces
- Scaffolding
- Chemical handling and use

4.4 LOCK OUT TAG OUT TRY OUT(LOTOTO) PROCEDURE

The contractor shall be required to adhere to the LOTOTO procedure for any maintenance work of an equipment or machinery to guard against inadvertent reconnection while still under service as outlined below:

- 1) Ensure that before any work can be conducted on equipment or machinery, the energy source shall be turned off
- 2) Energy source isolated from all potentially hazardous energy sources
- 3) Ensure residual energy is released
- 4) Locked out and secured against reconnection
- 5) Tested and earthed where applicable
- 6) Barricaded and warning signs displayed before employees perform any servicing or maintenance where unexpected energization, startup, or release of stored energy could cause injury.
- 7) All work personnel shall be provided with information, instruction and training to ensure they are competent to undertake their assigned duties in a safe a manner

4.5 SAFE WORKING PROCEDURES

4.5.1 EARTH WORKS

Earth works shall be undertaken during construction of staff houses, fencing, gates and fire watch towers; road works and burrow pits. Earth works comprise of small excavation for foundation of houses and fencing; removal of top soil and vegetation on road construction and major excavation on burrow pits where soil and murrum are sourced to facilitate construction of infrastructures. Excavation works shall involve both manual and mechanical means where applicable. The equipment required for excavation shall be a combination of heavy mobile equipment including excavator, back hoe, wheel loader, motor grader, roller and dump trucks for mechanised earth

works and spade, pick axe and hoe for manual earth works. The contractor shall ensure adherence to the outlined safe working procedures to safeguard the health and safety of workers including:

- 1) The contractor shall prepare and submit a written method statement to the PCU team through the implementing agency detailing how earthworks work shall be conducted
- 2) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team through the implementing agency for approval. A baseline Hazard Identification and Risk Assessment for Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 3) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) The contractor shall provide appropriate personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 7) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) The contractor shall ensure that drivers and operators are competent and have valid operating and driving licenses and are above the age of 18 years
- 9) The contractor shall ensure that all workers shall attend a toolbox meeting prior to commencement of earth works which shall be documented
- 10) The operator and driver shall undertake inspection of the equipment prior to work and required to report any sighted defect to the supervisor
- 11) The operator and driver shall be required to take a walk around the vehicle to ensure that no person or animal is resting under the equipment

- 12) The contractor shall ensure that workers maintain a safe distance from the mobile equipment and not position themselves in blind spots
- 13) The operator shall be required to be alert and is prohibited from engaging in distracting activities while operating the equipment including mobile phone use whether texting, receiving or making call, listening to music or internet browsing, and cigarette smoking.
- 14) The operator shall not designate his /her work to any other operator whether qualifies or not. In his/her absence the operator will be required to report to the management whom shall assign a competent operator to undertake the work.
- 15) The operator shall lock the equipment when left unattended to prevent unauthorized persons from gaining access
- 16) The operator shall be prohibited from training workers on equipment operation
- 17) The operator shall not carry any extra passenger in the operators' cabin or allow entry of workers into the cabin to rest
- 18) The operator shall be required to switch off the equipment engine while refueling
- 19) The contractor shall ensure housekeeping is adhered to in the operators cabin and storage compartments
- 20) No employee shall be allowed to rest in the cabin, on or under the equipment
- 21) Where the dust is immense the contractor shall undertake dust suppression measures by wetting the roads with water to prevent the dust from being nuisance to the community and also impacting on visibility.
- 22) The contractor shall ensure that pre inspection of excavations is undertaken prior to entry to ensure the excavation is not compromised and also confirm absence of biological hazards more so snakes that can access the excavations.
- 23) Where there is doubt on the existence of underground utilities, contact will be made to the relevant authority for more information before excavation. The utilities may include but not limited to buried electric cables, sewer lines, telecommunication cables and water pipes
- 24) Adequate measures shall be undertaken to prevent collapse of excavation sides where there is a high probability of personnel injury. In compliance to The Factories Building operations and Works of Engineering Construction (BOWEC) (Safety and Health) Special Rules ,Rule 2 the contractor shall ensure any side of an excavation or earthwork in alluvial soil, soft rock, gravel, clay, ashes, debris or other weak ground shall not exceed eight feet

in height or, in the case of trenches less than four feet wide, shall not exceed five feet in height, unless it is securely timbered or shuttered so as to prevent, so far as is practicable and as early as is practicable, danger to any person employed from a fall or dislodgement of the material forming the side of or adjacent to any excavation or earthwork.

- 25) Where the excavation sides or earth work is worked in terraces of less than eight feet in height or at a safe angle of slope, the contractor shall not be required to observe guidelines outline in number 24
- 26) All excavated spoils shall be stored at a minimum of 1 metre away from excavation edge
- 27) All excavations are to be barricaded to prevent accident falls of personnel and equipment, this shall be done in compliance with section 56(11)of OSHA 2006 which states that an excavation in the ground more than two meters deep shall, except when work is actually being carried on, be covered or fenced to prevent any person from accidentally falling in and BOWEC rule 40 which states that every accessible part of an excavation ,pit, or opening in the ground(other than a trench) into or down the side of which a person employed is liable to fall a vertical distance of more than six feet six inches shall be provided with a suitable barrier to a height of at least two feet and as close as is reasonably practicable to the edge.
- 28) All excavation shall have reflective stripes attached to the hard barricades or other alternative means to ensure that the barricading tapes are visible at night
- 29) Stop blocks will be used to ensure that truck do not exceed the safety clearance when reversing.
- 30) The supervisor and operator shall undertake a ground inspection to ensure that it is firm to prevent the sinking and equipment getting stuck.
- 31) A permit to work shall be in place where excavations are 1.5 meters and beyond in depth
- 32) The contractor shall provide safe means of excavation access and exit in form of graded slopes, graded access route, stairs or ladders
- 33) The contractor shall not use combustible equipment in excavations due to the risk of asphyxiation due to insufficient oxygen displaced by carbon monoxide produced by equipment unless the area is actively ventilated

4.5.2 COMPACTION

Compaction activities shall be undertaken by use of mobile heavy equipment and hand-held - guided equipment including plate vibrator and earth rammer. Vibration exposure levels information shall be checked on the basis of daily exposure time and data provided by equipment manufacturers. Workers are exposed to Whole body through a supporting surface especially through the seat and floor of the equipment while hand arm vibration is transmitted from work processes into workers' hands and arms. Hand-arm vibration can cause a range of conditions collectively known as hand-arm vibration syndrome (HAVS), as well as specific diseases such as carpal tunnel syndrome. While whole body will lead to backpains and headaches. Rollers are used where compaction is required for extensive areas while the hand-held guided equipment are use in areas with space constraints and also compaction level required. The contractor shall ensure adherence to the outlined safe working procedures to safeguard the health and safety of workers from vibrations including

- 1) The contractor shall prepare and submit a written method statement through the implementing agency to the PCU team detailing how assigned work shall be conducted
- 2) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted
- 3) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license

- 7) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) The contractor shall ensure that the handheld operator is conversant with the equipment operating mechanism including emergency stop button.
- 9) The contractor shall adopt dust suppression methods to ensure that compaction activities generation of dust is reduced
- 10) The contractor shall ensure that use of powered hand held and guided compactors shall be done in a manner that will guard against prolonged exposure to vibration, this will be achieved by job rotation, frequent breaks and safe handling technique on the equipment
- 11) Diesel or petroleum powered equipment shall be fueled when the engine is turned off
- 12) If it shall be required for the fuel to be stored and transported within the project site in small containers it shall be done so by use of approved fuel metallic jerricans with a lid
- 13) The contractor shall avail drip trays that shall be used during refueling to ensure that spills do not occur that could contaminate the ground
- 14) The hand-held guided equipment shall be turned off and engine allowed to cool before refueling
- 15) The contractor shall provide appropriate fire extinguisher and train the workers on fire safety as a precaution to ensure prompt response in case of fire and prevent injury and extensive equipment damage
- 16) The contractor shall ensure that the roller shall have adequate seat suspension to minimize the whole-body vibration received by the operator
- 17) The operator shall not engage in distracting activities while operating the equipment including mobile phone use whether texting, receiving or making call, listening to music or internet browsing, and cigarette smoking.
- 18) The operator shall not designate his /her work to any other operator whether qualifies or not.
- 19) The operator shall lock the equipment when left unattended to prevent unauthorized persons from gaining access
- 20) The operator shall be prohibited from training workers on equipment operation
- 21) The operator shall not carry any extra passenger in the operators' cabin or allow entry of workers into the cabin to rest

- 22) The operator shall be required to switch off the equipment engine while refueling
- 23) The contractor shall ensure housekeeping is adhered to in the operator's cabin and storage compartments
- 24) No employee shall be allowed to rest in the cabin, on or under the equipment
- 25) The heavy equipment shall ensure that the equipment is parked with the parking gear engaged, cabin door locked and key returned to the authorized custodian
- 26) The Hand held and guided equipment operators shall ensure proper storage of equipment is done at the end of a working day
- 27) The operator for the hand-held equipment shall not engage in strenuous activities for lifting and moving the equipment when turned off. The contractor shall ensure adequate means of transport are available and manual handling minimized

4.5.3 DEWATERING

During work execution heavy rains can lead to water ingress in trenches and excavations rendering the area unsafe for work. The contractor shall ensure adherence to the outlined safe working procedures to safeguard the health and safety of workers including:

- 1) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency through implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 2) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 3) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 4) The contractor shall ensure that all the employees have undergone through health and safety induction training where dewatering safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction

- 5) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 6) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 7) The contractor shall dewater and inspection done before allowing entry to the excavation. Water will be channeled in such a way that it does not result to creating disturbance to neighbouring areas.
- 8) The water pumps shall be in good working condition
- 9) Care shall be taken to ensure that oil spillage does not occur
- 10) Electrical safety shall be observed to ensure that no electrical contact will occur that could result to shock of the workers.

4.5.4 STEEL FIXING

Steel fixing activity involves use of Steel cutting and bending. Machinery that shall be used include both powered and hand tools which include steel bending machine, steel cutting machine, Hacksaw. The contractor shall ensure the following guidelines are adhered to during steel fixing:

- 1) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 2) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 3) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 4) The contractor shall ensure that all the employees have undergone through health and safety induction training where steel fixing safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction

- 5) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 6) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 7) Awareness on adopting correct posture while working to ensure that back strains do not occur. Housekeeping will be undertaken to ensure clear walk ways to prevent trips and falls and proper waste management observed to avoid packaging materials been strewn all over.
- 8) All equipment provided for the steel fixing shall be in good working condition and competent personnel involved.

4.5.5 FORM WORK LAYING

Form works are molds used to support concrete. The formworks are made of different materials but commonly used are wooden planks, plyboards and metallic shutter. Both powered and hand tools shall be used in the activity to ensure that formworks are cut to desired sizes and secured in position by use of nails. Portable tools include but not limited to portable circular saw and drills. Hand tools include saw and hammer. The contractor shall ensure adherence to the outlined safe working procedures including:

- 1) Undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 2) Ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 3) Provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 4) Ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction

- 5) Undertake due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 6) Ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 7) All portable powered tools shall be double insulated and in good working conditions free from defects including missing plugs, damaged cords, missing or defective guards.
- 8) Powered generators shall be in good working condition and grounded
- 9) Electric distribution board shall be provided with a Ground Fault circuit Interrupter and shall be provided with a cover and a lockable door to prevent unauthorized access
- 10) Substandard electrical connections shall be prohibited including use of direct wires for connection
- 11) Pre use visual inspection shall be undertaken before using the equipment
- 12) The portable powered equipment shall not be left plugged in electrical outlet when not in use
- 13) The powered tools shall not be carried by the cord or yanked from the outlet socket instead they shall be carried by the handle provided
- 14) Ensure that only Competent persons shall be allowed to operate electric powered equipment
- 15) Cutting of wood and ply boards shall be undertaken in a safe manner to prevent kick backs
- 16) Provide adequate and safe working platform for works at height. This shall be in the form of scaffolds which shall be erected and dismantled by competent persons
- 17) Ladders shall not be used as working platform for continuous works that shall go beyond 30 minutes
- 18) All hand tools provided shall be in good working condition and shall be repaired when damaged or blunt
- 19) Ensure adequate housekeeping is observed ensuring that all tools area cleaned and stored in designated area and shall not be left scattered at the work area and formworks stripped down shall have the nails removed and adequately stacked in a designated area

4.5.6 CONCRETING

During the fencing, construction of staff houses and watch towers concrete works shall be undertaken. Concrete is a compound material made up of cement, sand, coarse aggregate and water. Various equipment shall be used including trucks, concrete mixer, Hand vibrator, Masonry trowel, Measuring box, Mixer machine, Needle vibrator. To safely execute any concreting task the contractor shall adhere to the following guidelines:

- 1) Prepare and submit a written method statement through the implementing agency to the PCU team detailing how assigned work shall be conducted
- 2) Undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 3) Ensure all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) Provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) Ensure all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) Undertake due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 7) Ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) Make arrangements to permit minimal exposure to dust by controlling the process to prevent escape of cement dust to the atmosphere.
- 9) Provide respiratory protection to minimize the amount of dust inhaled. Handling of wet concrete will be undertaken whilst the hands and foot are protected by provision of appropriate hand gloves and gumboots to guard against negative effects such as skin dermatitis.

- 10) The contractor shall provide eye protection to prevent entry of concrete splatter into the eyes
- 11) The contractor shall ensure that equipment provided for concreting works are in good condition including hand tool, powered tools and mobile tools
- 12) Concrete waste and washout shall be disposed in a designated area, indiscriminate disposal of waste concrete shall be prohibited in IFPA-CD project

4.5.7 WORKING AT HEIGHT

Working at height will take place at the IFPA-CD project during the construction of staff houses, watch towers and visitor centers, visitor gates, tracks, trails, bridges, and board walks. Falls from height and falling objects could result to death or permanent disability. Utmost care shall be undertaken to ensure that workers planning to work at height are adequately prepared through training. The following guidelines shall be adhere to while working at height:

- 1) The contractor shall prepare and submit a written method statement to the PCU team detailing how assigned work shall be conducted
- 2) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 3) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license

- 7) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) Contractors shall be required to take their employees through a working at height training and issue with a height pass before being allowed to work.
- 9) Scaffolds, mobile elevated working platform (MEWP), man cage, hoist and lifts shall be erected safely or be in safe working condition accompanied by relevant certification from relevant authorities.
- 10) Area below work at height shall be secured to prevent unauthorized entry.
- 11) Work at height shall be avoided where it is reasonably practicable

4.5.8 LADDER SAFETY

Ladders if not used in a correct way may result to falls and injuries. Most falls from ladders occur due to wrong selection of ladder type, improper set up of ladder, sudden slip of ladder, slips from ladders by workers, loss of balance, overreaching or when the ladder is knocked off. The contractor shall be required to provide ladders that are free from damage and adhere to the following measures to prevent falls from ladders:

- 1) shall submit through the implementing agency in accordance to every ladder in IFPA-CD project shall be of good and rigid construction, sound material and adequate for the purpose which it is used, and shall have evenly spaced rungs not more than twelve inches apart
- 2) Pre inspection shall be done prior to use to check for defects that may compromise the safety of the personnel.
- 3) Defective ladders shall not be permitted for use
- 4) Ladders shall be placed on a firm levelled ground and a ratio of 4:1 i.e., 1 unit out for every 4 units up
- 5) Ladders shall not stand on loose bricks or other loose packing
- 6) The ladder shall be secured by tying it off to a suitable point by use of both stiles to prevent undue swaying or sagging
- 7) Assessment of the work area shall be done to look out for overhead power lines. A safe distance shall be maintained away from energised powerlines.

- 8) The ladder shall be placed against a strong upper resting point and protected against being knocked off by vehicles by use of suitable barriers
- 9) Ladders shall not be placed on moveable objects including pallets, bricks, excavators, forklifts or wheel loaders
- 10) Ladders shall be of adequate length to safely undertake the task
- 11) When used to access an upper landing surface, the siderails shall extend at least 3 rungs above the upper landing surface
- 12) Portable ladders shall be provided with a skid resistant material to minimise slipping
- 13) Ladder's rungs shall be free of contamination including mud and oil that could result to slips while using the ladder, in addition the personnel shall be required to ensure the foot ware is free from any contamination
- 14) Only one person shall be permitted to use a ladder and shall be required to maintain a three point of contact and face the ladder when climbing or descending
- 15) Carrying of loads on a ladder shall not be permitted instead a toolbelt shall be provided or any other suitable means that shall ensure the tools and materials are well secured
- 16) Overreaching shall not be permitted while using a ladder
- 17) The ladder shall be moved or adjusted without personnel on it
- 18) Ladders shall not be used as a working plank by placing them horizontally
- 19) Do not Extending ladders by joining two ladders
- 20) Do not over load ladders
- 21) All ladders constructed at side shall be made of wood free of defects and shall not be painted.
- 22) All ladders shall be store in a safe and secure area while not in use to avoid damage from weather and personnel

4.5.9 SCAFFOLD SAFETY

A scaffold is an elevated, temporary work platform used for working at height where work cannot be safely done on or from the ground.

The contractor shall the safety of the employees when erecting and using scaffold by:

- 1) The contractor shall prepare and submit a written method statement to the PCU team detailing how assigned work shall be conducted

- 2) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted
- 3) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 7) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) Scaffold erection and dismantling shall be done by a competent having adequate experience of the work
- 9) Before any erection of scaffold, the contractor shall ensure that adequate scaffolding materials are available, free of defects and a competent team of scaffolders.
- 10) The scaffold standards shall be vertical or lean slightly towards building or structure and shall be spaced not more than six feet apart in masons' heavy-duty scaffolds, not more than eight feet in brick layers' or putlog scaffolds and not more than ten feet apart in painters' or light duty scaffolds (BOWEC)
- 11) Ledgers shall be as nearly as possible horizontal and shall be securely fastened to the standards
- 12) Putlogs shall be straight and shall be securely fastened to the tops of the ledgers or to the standards

- 13) The contractor shall ensure that every scaffold shall be securely supported or supported and shall be sufficiently and properly braced to ensure stability and unless it is properly designed and constructed as an independent and stable scaffold, shall be securely anchored to the building or structure (BOWEC)
- 14) All scaffolds shall be erected on a firm levelled groundless bricks or other unsuitable materials shall not be used for the construction or support of any scaffold
- 15) All boards and planks used as working platforms shall not be less than eight inches wide or in the case of boards or planks exceeding two inches in thickness, not less than six inches wide. With regard to putlog positioning putlogs the following board thickness shall be adhered to:

Distance between successive putlogs	Board or plank thickness
Does not exceed three feet three inches	Not less than one and a quarter inches
Exceed three feet three inches but does not exceed five feet	Not less than one and a half inches
Exceeds five feet but does not exceed eight feet six inches	Not less than two inches
Exceeds eight feet six inches	Not less than three inches

all boards shall rest securely and evenly on the supports and shall not project beyond its end support to a distance exceeding four time its thickness.

- 16) Where a person may fall six feet six inches, suitable strong guard rails to a height of at least three feet and with toe boards up to a height of not less than eight inches shall be provided
- 17) Safe means of access shall be provided
- 18) Ensuring all scaffolding components are available during erection and it is done to the manufacturer's standards including toe boards, cross braces, standards and ledgers, putlogs, baseplates, mud still, mid rail and guard rail.
- 19) Prohibited against any unauthorised alteration or use of an incomplete scaffold
- 20) Prohibit against overloading of scaffolds
- 21) The health and safety representative shall be required to inspect the scaffold and clear it for use by putting a green tag on the scaffold, A yellow tag for incomplete and a red tag for prohibiting use.

4.5.10 RIGGING AND LIFTING

The contractor shall ensure that rigging and lifting shall be undertaken in a manner that will ensure the safety of the crew is safeguarded. Rigging and lifting equipment include cranes and forklifts. Before any rigging and lifting is undertaken the following measures shall be adhered to:

1)The contractor shall prepare and submit a written method statement through the implementing agency to the PCU team detailing how assigned work shall be conducted

2)The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.

3)The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.

4)The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.

5)The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction

6)The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license

7)The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.

8)All lifting gears used shall be in compliance with section 71(1) of OSHA 2007 which states that lifting gear of whatever materials shall not be used unless it is of good construction, sound and suitable material, adequate strength, free from patent defect and properly maintained

9)All lifting gears used to lift loads exceeding fifty kilograms shall be in compliance with section 71(2) of OSHA 2007 and not be used unless it is tested and examined by or on behalf of the

manufacturer or by an authorized person and a certificate of 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

10)All lifting appliance with a safe working load of more than one hundred and fifty kilograms or a lifting machine shall not be used unless the appliance or machine has been thoroughly examined by an authorized person within a period determined by its construction and conditions of service provided that the period shall not exceed fourteen months in compliance to section 72(7) of OSHA 2006

11)All lifting equipment shall be operated by a competent person with adequate knowledge, experience and skills and above the age of eighteen years in compliance with section 72(13 and 14) of OSHA 2006

12)Any lifting operation done in the proximity of electric power lines shall be undertaken in a manner that will not result in electrical contact of the equipment and shall not approach within six meters of the place in accordance with section 72(11) of OSHA 2006

13)A lift plan shall be developed outlining how the lift will be undertaken and responsibilities of the crew.

14)Lifting area shall be accessed by authorized person and shall be secured from unauthorized by use barricading tapes or cones.

15)All loads to be lifted shall be balanced and secured to prevent them from falling during the lift in compliance to section 72(15 of OSHA 2006)

16)No person shall be permitted to ride on a load, rest or stand under a suspended load or guide a load in direct contact of hand. All persons involved in the lifting activity shall use a tag line to guide the rope and shall stay clear of all suspended loads and shall not at any one-time ride on suspended loads

17)Appropriate signages shall be displayed cautioning others on the hazards and risk present including falling objects, crushing from detached loads and overturning of equipment

18)The capacity of the equipment and material will be determined prior to the lift to ensure that overloading does not occur that may result to overturning of the crane.

19)The operator shall be tasked with daily visual inspection prior to work to ensure that the equipment is in good working condition and safety features such as limit switch, outriggers and chart loads are functional.

20)All rigging accessories including web sling, chains, wire rope, D shackle and eyebolts shall be inspected prior to any usage to ensure that they are free of any damage

4.5.11HOUSE KEEPING

Housekeeping shall be the responsibility of the contractors who shall incorporate housekeeping procedures in their day today works. All work materials, equipment, tools and waste generated shall be stored in a manner that they will not be a source of hazards more so tripping hazards. The supervisor shall ensure daily housekeeping is undertaken in his/her area of supervision without fail. The contractor shall establish a designated area for storage of recyclable waste which shall be segregated.

4.5.12ENVIRONMENT PROTECTION

The contractor shall ensure that all the works do not result in detrimental effects to the environment.

- 1) Fuelling of vehicles shall be done in a manner that spillage will not occur, drip trays will be used when refuelling to eliminate spillage on the ground.
- 2) Equipment shall be in good working order to avoid air pollution from exhaust fumes.
- 3) Wetting of the roads to keep down dust that can be dispersed to neighbouring communities causing nuisance.

4.5.13WASTE MANAGEMENT

The contractor shall ensure that any waste generated during the implementation of IFPA-CD project is managed in compliance to The National Environment (Waste Management) Regulations,2020 and in a manner that will not be detrimental to the workers, communities and the ecosystem. The contactors shall adhere to the following guidelines to ensure proper waste management:

- 1) Ensure proper waste management by adhering to the hierarchy of waste management practices which includes prevention, reduction at source, re-use, recycling, recovery,

treatment and responsible disposal Identify the various types of waste to be generated and have a tracking register

- 2) Designate areas provided for temporary waste storage on site.
- 3) Posting of signages identifying the type of waste stored and warning against unsafe acts including smoking especially where hazardous waste is stored
- 4) Incompatible waste shall not be stored together or with substances that may result to fire and explosion
- 5) Waste shall be segregated from source in waste bins that shall have covers to avoid littering.
- 6) A licenced waste handler shall be contracted for offsite disposal
- 7) The contractor shall in compliance with Section 53 of The National Environment (Waste Management) Regulations,2020 complete a waste manifest for each consignment of hazardous waste generated in format set out in Schedule 10 of the regulations. The manifest shall be stored in hard copy at the site office and availed to NEMA environmental inspectors and other authorized officers upon request.
- 8) The contractor shall undertake due diligence to ensure that disposal is done at designated dumpsite by the waste handler
- 9) No waste shall be disposed in a manner that the waste would find its way into the community.
- 10) All hazardous waste shall be stored away from the rest of the waste.
- 11) Hazardous waste shall be stored separately and not mixed with a different category of hazardous waste, on-hazardous waste or any substance or material other than hazardous waste of the same category
- 12) Arrangements shall be made for the disposal of health care waste generated from first aid rooms including provision of adequate and standard bins for disposing off the waste.
- 13) The contractor shall make an assessment the health care waste which shall include Infectious waste include waste contaminated with blood and other body fluids
- 14) The contractor shall provide information, instruction training and supervision to workers tasked with waste collection and storage of waste disclosing the hazards and risks associated with
- 15) Ensure periodic and annual check-up especially workers exposed to hazardous waste

- 16) The contractor shall provide personal protective equipment to the workers tasked with handling waste

4.5.14HOT WORKS

The contractor shall ensure that all measures are undertaken to prevent unplanned fire in the workplace. Hot works are activities involving open flames or a source of heat that could ignite materials in the work area. Applicable to all operations involving heat such as Arc/Gas Welding, Cutting Torches, Brazing, Gas Heating, Blowlamps and similar appliances, and abrasive grinding and cutting. Training and awareness shall be conducted to ensure that hazards and risks of hot works are well understood and control measures undertaken but not limited to:

- 1) The contractor shall prepare and submit a written method statement to the PCU team detailing how assigned work shall be conducted
- 2) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted.
- 3) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 4) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 5) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 6) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 7) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 8) All hot works shall be undertaken by competent person

- 9) Provision of adequate personal protective equipment including welding gloves, overall or apron, welding face shield or goggles, respirator protective equipment and earplug or earmuffs. Caution shall be taken to ensure that the PPEs provided are compatible.
- 10) Provision of fire extinguisher
- 11) A hot work permit shall apply
- 12) Completion of work minutes to closing time to check for any smoldering materials
- 13) Adequate housekeeping shall be observed

4.5.15 GAS CYLINDER SAFETY

Oxygen and acetylene flames are commonly used in construction sites for welding and cutting activities. The contractor shall ensure that cylinders are handled in a safe manner to ensure the safety of the employees. The contractor shall ensure that: -

- 1) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 2) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 3) The contractor shall ensure that all the employees have undergone through health and safety induction training where gas cylinder safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 4) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 5) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 6) The cylinders shall be capped when not in use. The capping protects the breaking of the gas cylinder valve that can result to sudden release of compressed gas which can turn the gas cylinder into a projectile.
- 7) The gas cylinders shall not be exposed to high temperatures whether in storage or use. As they can explode when exposed to high temperatures

- 8) The contractor shall ensure that inspection of the cylinder valves to ensure they are free from leakages. Leakage of gases apart from oxygen can result in the displacement of oxygen and can result to unconsciousness or death through asphyxiation especially in a closed room. Leakage of Oxygen cylinders can result to excess oxygen in a room can result to oxygen enriched atmosphere which is a fire hazards as oxygen enriched atmosphere supports combustions and makes materials to burn violently. AS outlined in the fire triangle the elements required are heat, oxygen and fuel.
- 9) Contractor shall ensure that the gas cylinders are well labelled and colour coded and purchased from licenced dealers
- 10) Gas cylinders storage area shall be in an open area and protected from weather
- 11) When in use the cylinders shall be positioned in an upright position and secured in a manner to prevent falls
- 12) For ease and safe movement, the contractor shall provide a cart/trolley that shall be used to move the cylinders in the workplace
- 13) Before moving the cylinders on the trolley, the valves shall be closed, regulator removed, valve caped and cylinder secured with a chain.
- 14) The contractor shall ensure that all fittings are compatible with the gas cylinder in use
- 15) Flashback arrestors shall be fixed onto the pressure regulators on both the acetylene and oxygen cylinders

4.5.16 CHEMICAL HANDLING

During implementation on the IFPA-CD Project various chemicals will be used including pesticides, solvents, paints and lubricating oil, petroleum and diesel. Chemicals are classified based on their characteristics including toxic, chemical or physical, corrosive and irritant properties; allergenic, sensitizing, carcinogenic, teratogenic and mutagenic as well as effects on the reproductive system. Hazardous chemical may gain entry into the body through various routes including inhalation, injection, absorption and ingestion. Inhalation of the hazardous substances occur when the contaminants are airborne and may take the form of solid particles, liquid particles, mist fumes, gases, vapors and fibers. Injection by accidental cuts and pricks with contaminated objects, absorption through the skin or in the eyes and finding their way into the blood stream, ingestion this occurs mostly through ingestion of contaminated food, drinks, cigarettes and contaminated hands. Effects of toxic chemicals are either acute where effects show up immediately

or chronic where they take years to manifest. The contractor shall ensure that all practicable measures are undertaken to prevent exposure of hazardous chemicals to the community and workers. The contractor shall adhere to the following guidelines when it comes to transportation, storage, use and disposal of hazardous materials:

- 1) Where feasible the contractor shall use materials that are less hazardous to the health.
- 2) The contractor shall not possess or use any chemicals listed in Schedule 8 of The National Environment Act, No.5 of 2019
- 3) The contractor shall engage a waste handler with a valid licence from The National Environment Management Authority to transport waste
- 4) The contractor shall ensure that for hazardous waste a waste handler with a valid licence shall be engaged and required to provide a copy of the transportation journey management plan in accordance with section 59 of The National Environment (Waste Management) Regulations,2020
- 5) Contractor shall ensure that storage of hazardous waste shall not exceed 3 tonnes at any given time and keep records of the stored hazardous waste in compliance to section 54 of The National Environment (Waste Management) Regulations,2020
- 6) The contractor shall comply with section 55 of The National Environment(Waste Management)Regulations,2020 ensuring that the hazardous waste is stored in a manner that it does not cause harm to human health or the environment, located in an area that does not inconvenience the neighbouring communities or pose a risk to fragile ecosystems, Contained in an impermeable surface to prevent leakage to the ground, water and surrounding environment, contained in storage containers that can be easily moved, secured from unauthorised access,
- 7) The contractor shall make arrangements for the segregation of waste in accordance with section 46 of The National Environment (Waste Management) Regulations,2020 which prohibits on mixing hazardous waste
- 8) The contractor shall prepare and submit a written method statement to the PCU team detailing how assigned work shall be conducted
- 9) The contractor shall undertake a hazard identification and risk assessment prior to undertaking assigned work and shall submit through the implementing agency to the PCU team for approval. A baseline Hazard Identification and Risk Assessment Investing in

Forests and Protected Areas for Climate smart Development (IFPA-CD) Project has been conducted

- 10) The contractor shall ensure that all workers shall undergo medical examination prior to commencement of work declaring them fit for work.
- 11) The contractor shall provide personal protective equipment to the workers prior to undertaking health and safety induction. This will ensure that training of PPEs will be easily understood by the workers.
- 12) The contractor shall ensure that all the employees have undergone through health and safety induction training where excavation safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 13) The contractor shall do due diligence to ensure that workers are competent for the assigned roles. This shall include undertaking interviews, verification of training certificates, years of experience, operating and driving license
- 14) The contractor shall ensure that all employees wear PPEs appropriately and maintain them in a clean and hygienic condition.
- 15) The Disclosing during registration of workplace of any hazardous chemical that shall be used in compliance with OSHA 2006 schedule 3
- 16) All chemicals purchased shall be in compliance with Section 96 of OSHA 2006 which requires that chemical data sheets containing detailed essential information, regarding the
- 17) identity, supplier and classification of the chemical, and the hazards, safety precautions and emergency procedures required for the chemicals be provided.
- 18) The contractor shall forward a copy of the chemical safety data sheet for each product to the commissioner as required by section 96(2) of OSHA 2006
- 19) The contractor shall ensure all packages containing hazardous chemicals are labelled and appropriate Safety Data sheet is available at the workplace in compliance with Section 97(1) of Osha2006
- 20) The contractor shall maintain a list of chemical safety data sheet which shall be kept at the work place and accessible in compliance with Section 97(2) of OSHA 2006
- 21) The contractor shall avail the chemical SDS to the worker who will handle the chemicals in compliance with Section 97(3) and it will be the responsibility of the contractor to ensure

that all the hazards and risk have been explained to the worker in a language that is understood especially where English is not understood

- 22) All containers containing chemicals shall be adequately labelled and writing legible
- 23) Medical Surveillance shall be undertaken in accordance to OSHA 2006.
- 24) The contractor shall ensure that workers are not exposed hazardous chemicals by providing appropriate personal protective equipment and training worker on proper use.
- 25) The contractor shall ensure that a designated area for taking meals is setup where employees shall be required to take their meals to prevent any contamination that may result from exposure to hazardous chemicals
- 26) The contractor shall ensure that workers are trained on the signs and symptoms to look for when working with hazardous materials and report to the supervisor immediately including dry red and itchy skin, flaking, blistering, crusting and swelling accompanied by pain. Prolonged exposure of skin to hazardous substances can lead to dermatitis which is the inflammation of the skin that could result from exposure to detergents, wet works, chemicals. The contractor shall put up measures to protected workers including Avoiding, protecting the skin and checking early signs
- 27) The contractor shall provide adequate washing facilities that are to be maintained in a clean and hygienic condition with adequate lighting and ventilation
- 28) First aid provision by ensuring adequate supplies and a competent first aider
- 29) During application the chemicals shall be used in the required amounts under the supervision of a competent person
- 30) The contractor shall not purchase excess of the hazardous chemicals instead it shall be done in a manner that will not result in excess of the hazardous chemicals at the workplace
- 31) All empty containers and obsolete chemicals shall be store in receptacles to be disposed by an approved person
- 32) The contractor shall prohibit smoking of cigarettes in areas where hazardous chemicals are store, used and disposed. "NO SMOKING" signage shall be conspicuously posted

4.5.17 FIRE SAFETY

The contractor shall make adequate arrangements to ensure the workplace is free from fire hazards and also ensure that the capacity to respond to fire emergencies are in place. The contractor shall:

- 1) Undertake a hazard identification and risk assessment of the workplace to comprehensively identify ignition sources, fuels and mitigation measures that can be adopted to eliminate and minimise fire incidences
- 2) Ensure that all the employees have undergone through health and safety induction training where fire safety shall be addressed, the employee shall be issued with an induction sticker outlining the date of induction
- 3) Ensure adequate fire detection appliances are available
- 4) Ensure adequate and appropriate firefighting equipment are present at work place
- 5) Firefighting equipment shall not be obstructed or obscured
- 6) Implementing of safe systems of work where open flames are involved including the permit to work system
- 7) Prohibit use of open flames without authorisation
- 8) Waste shall not be stored in excess at site and shall be disposed at intervals. This will ensure that the amount of fuel on site is reduced
- 9) Flammable materials shall not be stored in excess and it shall be prohibited to smoke in the vicinity of flammable substances
- 10) All electrical connections shall be conducted by a competent person
- 11) Overloading of electrical appliances shall be prohibited
- 12) Burning of waste on site shall be prohibited
- 13) Clearing of an area by use of fire is prohibited
- 14) Development of a fire Emergency and evacuation procedure
- 15) Designated emergency assembly point where workers are required to assemble in case of a fire incidence

4.5.18 ELECTRICAL SAFETY

During IFPA-CD project execution power shall be required to facilitate various activities including welding machine, drilling, cutting, lighting. The contractor shall source power from the mains where applicable or opt for power generators. The contractor shall ensure compliance with OSHA section 84 which states that all electrical apparatus, fittings conductors shall be sufficient in size and power for the work they are meant for and shall be constructed, installed, protected, maintained to prevent danger, as far as is reasonably practicable.

- 1) All electrical appliances are safe for use including generators, distribution boards, welding machines and powered tools.
- 2) Appropriate electrical protection shall be provided for all circuits against over load, short circuit and earth fault current.
- 3) All Plugs, socket-outlets, and couplers available in the construction site shall be as “splash proof” type.
- 4) All electrical appliances including but not limited to switch boards, extension boards shall be protected from rain and water.
- 5) No water logging shall be allowed around switchboards.
- 6) Earth leakage circuit breakers shall be provided on all distribution boards and main switchboards.
- 7) All fuses shall be of good quality and conform to the correct ratings, use of make shift wires or conductors.
- 8) Working on energized circuit/live wires is strictly prohibited.
- 9) All electrical installation and appliances shall be in conformance with good industry practices including: Ensure earthing is adequately done, Installation and functional residual Current device, Protection from water ingress, Protection from damage, Protection from unauthorized access, all works are undertaken by a competent person

4.5.19 COMPRESSED AIR

Compressed air if not used in a safe manner can result to injuries and in worst case scenario death. Compressed air can be stored in cylinders and air receivers or generated by compressors. Compressed air shall be utilized in the IFPA-CD Project during tyre pressurization, cleaning of motor vehicle filters where portable air receivers are utilized. The contractor shall ensure the safety of compressed air use by adherence to outlined guidelines: -

- 1) Any connection shall be done when isolating the main supply of compressed air
- 2) Isolation of the air supply shall be done at the main air valve when the not in use
- 3) The hose shall not be kinked or folded to stop the air but the air shall be cut off by closing the valve
- 4) The contractor shall provide personal protective equipment including goggles to protect the eyes from risk of injury from firing particles, appropriate gloves that air cannot

penetrate suitably rubber and leather, rubber or apron overall where there is risk of body contact with compressed air

- 5) Horse play is prohibited with the use of compressed air this include but not limited to directing the compressed air another person
- 6) No person shall be permitted to use compressed air to remove dust or dirt off the clothes due to the increased risk of skin perforation that may lead to air bubbles getting into the blood system and may cause possible embolism causing death
- 7) No personnel shall make attempt to stop a whipping hose, if possible, the air shall be cut off at the main valve and no personnel shall be required to approach until the hose has settled
- 8) All hoses shall be stored in a manner that shall not result to tripping hazards by ensuring that hoses are places away from access routes
- 9) The contractor shall provide an Air receiver that has the safe working pressure legible, be fitted with a suitable reducing valve to prevent the safe working procedure of the receiver from being exceeded
- 10) Shall be fitted with an accurate gauge indicating the pressure in the receiver in kilograms per square centimeter
- 11) Be fitted with a suitable safety valve adjusted to permit air to escape where the safe working procedure is exceeded
- 12) Fitted with suitable appliance for draining the receiver
- 13) Ensure air receiver and its fittings shall be of sound construction and properly maintained
- 14) Contractor shall ensure that the air receiver is inspected by an authorized persons and certificate issued failure to which the air receiver shall not be taken into use
- 15) No employee shall be permitted to use compressed air to remove dirt on the clothes or skin or for cooling purposes
- 16) The compressed air shall not be directed at another person

4.5.20 HANDTOOL SAFETY

During execution of the IFPA-CD project the contractor shall from time to time be required to use hand tools including screw drivers, hammers, saws, among others. To ensure the safety of the worker while using the hand tools the contractor shall adhere to the below measures:

- 1) All tools shall be used for the intended purpose and shall not be misused or altered
- 2) Workers shall be expected to carry tools in a safe manner that does not expose other workers to risk of injury.
- 3) All damaged tools shall be taken out of service for repair
- 4) Workers shall not carry tools with sharp blade or edges on their pockets

4.5.21 PERSONAL PROTECTIVE EQUIPMENT

The contractor shall be required to adequately assess the hazards at work place and provide appropriate BS EN certified PPEs.

- 1) Contractor shall provide information instruction training and supervision to ensure the workers wear appropriately and maintain cleanliness
- 2) Contractor shall provide PPEs that fits the worker
- 3) Contractor shall replace damaged and worn-out PPEs

Below is a summary of the personal protective equipment that shall be utilised in the IFPA-CD project including but not limited to:

Objective	Workplace hazards	Suggested PPEs
Eye and Face protection	Flying particles, molten metal, liquid chemicals, gases or vapours, light radiation	Safety glasses with side shields protective shades
Head protection	Falling objects, inadequate height clearance, and overhead power cords	Plastic Helmets with top and side impact protection
Hearing protection	Noise, Ultra-sound	Hearing protectors (ear plugs and ear muffs)
Foot protection	Falling and rolling objects, pointed objects, corrosive and hot liquids	Safety shoes and boots for protection against moving and falling objects, liquids and chemicals
Hand protection	Hazardous materials, cuts or lacerations, vibrations, extreme temperature	Gloves made of rubber or synthetic materials (Neoprene), Leather, steel, insulating materials etc

Respiratory Protection	Dust, fogs, fumes, mists, gases, smokes, vapours	Face masks with appropriate filters for dust removal and air purification (chemicals, mists, vapours and gases). Single or multi-gas personal monitors, if available
	Oxygen deficiency	Portable or supplied air (fixed lines) Onsite rescue equipment
Body/leg protection	Extreme temperature, hazardous materials, biological agents, cutting and laceration	Insulating clothes, body suits, aprons etc of appropriate materials
Height and Access protection	Fall from height	Full body harness with double Lanyard

Source: World Bank EHS Guidelines,2007(modified to include height and access protection)

4.5.22 TRAFFIC MANAGEMENT

IFPA-CD Project traffic management will be planned and executed in a safe manner ensuring that vehicles and pedestrians on site move in a safer manner. The contractor shall ensure adequate traffic management by adhering to the below guidelines:

- 1) The vehicle and pedestrian routes shall be of adequate width to accommodate wide load equipment including the low beds
- 2) Provision of sufficient routes for the pedestrians and vehicles ensuring separation is achieved to prevent contact of vehicles and employees. This shall be achieved by ensuring use of barriers, where vehicles and employee's intersect zebra crossing shall be provided and use of separate entry and exit gates for vehicles and pedestrians.
- 3) The contractor shall undertake a routes assessment ensuring that all utilities and obstructions have been mapped and information disseminated to the drivers and operators including overhead power lines and bridges
- 4) All pedestrians' routes shall be kept free from obstruction
- 5) All vehicle routes in use shall be marked and signages posted cautioning drivers on speed limit, sharp bends, wild animals among others that shall be decided by the project team

- 6) All designated vehicle routes shall be maintained in safe conditions by undertaking regular maintenance
- 7) Vehicle routes shall be designed in a manner that reversing steep slopes, sharp bends and corners are avoided, where possible one-way routes shall be adopted
- 8) Vehicle and equipment parking areas shall be designated and all vehicles shall be parked ready to go
- 9) All routes shall be assessed for adequate lighting and where natural light is found inefficient especially due to weather drivers and operators will be required to make use of the headlights to increase their visibility
- 10) As a minimum all personnel accessing IFPA-CD project shall be required to have a helmet, Safety boots and high visibility vest
- 11) No person shall rest under any vehicle whether it is out of service or in use at sight
- 12) All drivers and operators shall undergo health and safety induction training prior to commencement of work. Specific training on equipment safety will also be undertaken
- 13) All drivers and operators shall undergo medical examination prior to commencement of work declaring them fit for work.
- 14) No driver and operator shall be permitted to drive or operate any vehicle when suspected to be under the influence of drugs and alcohol. This shall be an offence that could result to termination from work.
- 15) Driver and operator are required to disclose to their supervisor if under prescribed medication that results to drowsiness for an alternative arrangement to be made.
- 16) The contractor shall ensure that drivers and operators recruited are competent and have a valid driving and operating licence
- 17) It shall be the responsibility of the driver and operator to report any defects immediately they come to their attention and it shall be an offence if the driver or operator continues to work with a defective equipment
- 18) Where the construction equipment will be required to use public roads a flag man will be required to be positioned the intersection and signages posted alerting other motorist of turning vehicles
- 19) The contractor shall ensure that the driver/operator conducts daily checks for the equipment or vehicle

- 20) Heavy equipment operators shall not allow entry of personnel into the cabin whether in operation or stationery
- 21) Drivers and operators shall not leave the vehicle or equipment unattended unless it is off, brakes secured and the ignition key taken out
- 22) The driver and operator shall not engage in any distracting activities including smoking, mobile phone use and over reaching
- 23) The contractor shall provide safe areas for loading and offloading of materials with restricted entry
- 24) During loading and offloading all vehicles will have the brakes engaged and stop blocks used
- 25) Overloading beyond the vehicle's capacity shall be prohibited
- 26) All loads are to be secure in a safe manner
- 27) To prevent overturning of truck during tipping the contractor shall ensure that it shall be done on levelled ground, tail gate released and secured before tipping, truck bed shall be lowered before the vehicle moves
- 28) No driver or any other personnel shall be permitted to climb into an elevated bend to free stuck materials
- 29) The contractor shall ensure that all vehicles shall be in safe condition and in compliance with all statutory requirements including Stability, Provision of same means of access, Functional ignition, Functional gauges including water, fuel, speedometer, Accelerator and brake pedals, Hand break or foot break, Side mirrors, Horn, Lights including break, reverse, head lights, indicators, Reversing alarm, Seat belts guarded rotating parts, Dead man switch and Rollover protection for heavy equipment
- 30) During maintenance works all safety precautions shall be in place to prevent inadvertent movement of the vehicle or associated parts. Safety precautions shall include but not limited to use of stop blocks, switching off the vehicle and removal of ignition key

4.5.23 EMERGENCY RESPONSE PLAN

There shall be a **(IFPA-CD) Project** Emergency Response Plan to ensure adequate measures are in place to adequately respond to the emergency. This will ensure that rescue is hastened, situation deescalated with minimal injuries and damage. The contractor shall ensure

- 1) Awareness on probable emergencies shall be communicated to the workers during induction
- 2) A map of the project area indicating emergency assembly points and first aid stations shall be posted in the various work places
- 3) All emergency contacts are up to date and posted prominently at various workplaces
- 4) Where there are workers with disabilities the contractor shall make arrangements to ensure that the worker is safely evacuated in case of an emergency
- 5) An annual fire safety drill shall be conducted involving all project contractors

The contents of the ERP to be communicated during induction shall include:

- 1) Location of the work area
- 2) List of emergencies anticipated
- 3) Equipment required to respond to emergencies including firefighting equipment
- 4) Means of alerting workers on emergency manual or automatic alarms
- 5) Employee action plan on alarm activation
- 6) Designated evacuation routes
- 7) Emergency Assembly point
- 8) Fire marshals
- 9) Chain of communication command
- 10) Emergency contacts
- 11) Emergency drill
- 12) Personal Emergency Evacuation Procedure (PEP) for employees living with disability

(IFPA-CD) Project anticipated emergencies include

- 1) Fire
- 2) Electric Shock
- 3) Chemical Spills
- 4) Public riot
- 5) Medical emergencies

At the sound of the alarm, everyone shall be required to adhere to the following laid-out procedure which shall be posted prominently at work place:

- 1) Stop the work that was been done
- 2) In case powered equipment was in use, switch off and exit ensuring access roads are not obstructed
- 3) All shall head to the designated emergency assembly point closest to the work location
- 4) Once at the emergency Assembly point workers shall line up according to the company
- 5) Ahead count shall be conducted
- 6) Debriefing shall be conducted by the project manager

4.5.24 HEALTH AND SAFETY INSPECTION

Various inspections shall be undertaken Shall be conducted at the beginning of work shift and shall be undertaken by workers and supervisors. Daily inspection shall be conducted on:

- Vehicles and equipment which shall be captured in a pre-use inspection template
- Personal Protective Equipment undertaken by workers and randomly verified by the supervisor
- Hand and powered tools

4.6 IMPLEMENTATION OF IFPA-CD OHSM

Inadequate implementation of the OHSM may result where the stakeholders do not have adequate information on their responsibilities and roles, inadequate resources including finances and time, and failure to understand the scope of what it entails to have a safe and healthy workplace. To counter the drawbacks that may result during implementation the following shall be observed:

1. IFPA-CD project stakeholders shall be made known to them the contents of the OHSM and their individual responsibilities with regard to its implementation. This shall be achieved through trainings
2. The MWE in close collaboration with UWA and NFA shall make resources available for the implementation of the OHSM measures
3. MWE, NFA and UWA shall demonstrate leadership and commitment to the implementation of the OHSS
4. The contractors engaged shall be vetted to ensure that they have adequate arrangements in place to ensure the health and safety of workers
5. Legal compliance shall be compulsory

4.7 MANAGEMENT OF CONTRACTORS

The Contractors shall be required by the PCU to undertake their scope of work in compliance to GoU applicable policy, laws and regulation and IFPA-CD project's Occupational Health and Safety Measures which have been developed in line with GoU legal and regulatory framework, World Bank's Environmental and Social Standards, World Bank Group General Environmental Health and Safety Guidelines (WBG EHS Guidelines), International Labour Organisation Conventions and other Good International Industry Practices. While the PCU will coordinate the management of contractors and UWA shall manage the contractors on the ground.

4.7.1 Contractor Kick off meeting

There shall be a meeting between the implementing agency and the contractors prior to work commencement on IFPA-CD Project. The meeting Agenda shall include among others presentation of a summary of Occupational health and safety. Prior to the meeting the health, safety and labour requirements shall be shared with the contractor to be incorporated during mobilization to the IFPA-CD project site. The Kick off meeting agenda shall include but not limited to:

1. Implementing agency reiterating commitment to oversee occupational health and safety measures of the project are implemented by contractors
2. Implementing agency reiterating commitment to oversee that all labour requirements are met by contractors
3. Penalties that contractors may incur for failure to adhere to project occupational health and safety measures and labour standards

4.7.2 Contractor Mobilization

During mobilization to site the contractor shall: -

- 1) Submit a list of all the equipment and tools mobilized and workers recruited
- 2) Seek guidance on where to set up temporary offices, workshop and storage areas from the Implementing Agency
- 3) Ensure all equipment and tools are in good working condition. Powered equipment and tools have the potential to cause severe injuries including amputation and loss of lives if misused, used for the wrong task, used by incompetent workers and used while defective.

- 4) Ensure Equipment and machineries required to be inspected by a Department of Safety and Health (DOSH) approved person or inspector according to Occupational Safety and Health Act (OSHA) 2006 shall be undertaken and a certificate document and renewed as provided by Occupational Safety and Health Act (OSHA) 2006.
- 5) Ensure all workers have undergone through medical examination declaring them fit for work in accordance to Section 21 and storage of the information in accordance to section 22 of the OSHA 2006
- 6) Ensure that all workers have undergone through health and safety induction prior to work commencement. This will ensure that health and safety awareness through information, instruction and training in addition to undertaking competent supervision.
- 7) Ensure safe means of transport have been provided to the workers
- 8) Ensure adequate clean and well-maintained welfare facilities are provided
- 9) Adequate arrangements of waste collection and disposal in accordance with the guidelines on waste management provided by the implementing agency.
- 10) Adequate arrangements are in place to report on the required statistics as shall be outlined by the PCU
- 11) The contractor shall provide adequate and appropriate PPEs as a statutory requirement outlined in section 91 of OSHA 2006 without any cost incurred by the worker.
- 12) Ensure adherence to the maximum permissible noise levels (Leq) in dB(A) for construction sites which are 75 for day and 65 at night
- 13) The contractor shall initiate registration of the workplace one month prior to mobilizing by servicing the commissioner with a notice with particulars prescribed in schedule 3 of OSHA 2006 upon which a certificate of registration will be issued.
- 14) The contractor shall submit through the implementing agency to the commissioner a plan and any architectural drawings of a new workplace and of any alterations of an existing workplace for approval before the construction of buildings or alterations of existing buildings of workplaces begins

4.7.3 Workers recruitment

The contractor shall be required to abide by the (IFPA-CD) Project Labour Management Plan during recruitment and shall ensure:

- 1) Develop recruitment procedures which shall be documented and transparent, public and non-discriminatory
- 2) All job vacancies shall be advertised and applications for employment will only be considered if submitted via the official application procedures which shall be established by the contractors.
- 3) Job descriptions shall be provided in advance of recruitment stating the qualifications and skills required for each post.
- 4) Written contracts describing terms and conditions of work shall be provided to the workers. Where a worker does not have a command of the English language contract contents shall be explained to them in a language that they understand
- 5) Employees shall be required to sign the employment contract and the contractor shall give a copy of the contract to the worker and retain a copy
- 6) The contractor shall give priority for Unskilled labour to the communities
- 7) The contractor shall give two months prior notice to workers prior to termination.
- 8) No employee will be required to pay any hiring fees
- 9) Any contractor whose management team shall be involved in offering jobs for exchange of monetary, sexually favours or any other material of value shall be dismissed from the project after an investigation is undertaken and confirms the allegations
- 10) Interpretation services shall be provided for workers as and when required
- 11) Normal working time should not exceed 40 hours per week. With a five-day working week, the duration of daily work is determined by the internal work regulations approved by the employer after prior consultation with the representatives of the workers, in compliance with the established working week duration.

4.8 INCIDENT MANAGEMENT

The process shall be consultative to ensure root causes are identified and adequate and robust and timely corrective actions have been adopted. With this regard, the contractor shall be required to design a Corrective Action and Preventive Action (CAPA) plan which shall be discussed with the PCU, NFA, MWA and World Bank and agreed actions, responsibilities, timeline and monitoring program shall be adopted.

4.8.1 Incident reporting

The following shall be communicated and it shall be mandatory for all in IFPA-CD Project to adhere to the reporting procedure:

- 1) All employees Shall be required to report to the health and safety in charge of any incident including ill-health, injuries, property damage and environmental incidents
- 2) Contractor Health and safety in charge Shall inform the PCU and other appropriate authorities in compliance with local regulations team immediately through an incident notification form developed for the project indicating the severity of the injuries or damages
- 3) The PCU team shall Inform the World Bank

4.8.2 Securing the scene and attending to injured

- 1) Priority shall be given to injured employees or other persons by administering first aid and when required evacuation to a hospital
- 2) The accident area shall be cordoned off from the public
- 3) The accident scene shall be secured to prevent altering of evidence, this shall be achieved by use of barricading tapes
- 4) The accident scene shall be document by the health and safety officer by gathering data through photography

4.8.3 Equipment damage and Environmental incident

- 1) The damaged equipment shall be grounded and tagged not safe for use
- 2) A detailed inspection shall be undertaken by a competent person to identify the failure
- 3) Replacement and repairs shall be undertaken
- 4) Statutory inspections shall be undertaken before equipment is taken in for use
- 5) Immediate action shall be undertaken to contain an environmental incident preventing localised and long-term negative impacts
- 6) Long term clean up exercise shall be implemented on advise of a competent environmentalist

4.8.4 Witness Statements

- 1) The health and safety officer shall gather witnesses and conduct interviews to determine events that led up to the accident.

- 2) Care shall be taken to ensure that the witnesses do not collaborate their story and therefore the interview shall be conducted immediately and independently
- 3) The objective of the interview shall be that of fact finding and not for blame, this shall be communicated to the witnesses
- 4) The witness shall be required to append their signature as a true statement of the event as witnessed by them

4.8.5 Report Writing

- 1) The safety officer shall develop the sequence of events leading up to the accident
- 2) Conduct a cause analysis to determine the direct and root causes
- 3) Classify the incident in terms of severity
- 4) Determine the solutions both short term and long term
- 5) Develop a plan on implementation of corrective actions and monitoring

4.8.6 Communicating to other project stakeholders

- 1) Following an incident, it shall be required for the contractor to provide timely and concise information to the PCU on a continuous basis to be relayed to the World Bank and other relevant institutions and also cooperate with any independent investigating team that may be deployed to site.
- 2) The contractor shall undertake a root cause analysis ensuring all parties are involved including the workers, witnesses and the health and safety committee
- 3) The final report shall be sent to the PCU team with an aim of identifying the root causes and corrective measures to prevent reoccurrence.
- 4) The contractor shall share lessons learnt with the workers and the PCU shall ensure lesson learnt is shared among other contractors
- 5) The report shall be sent to World Bank and relevant Government agencies

The contractors shall be required to report any incident to the implementing agency team outlined below immediately followed by a comprehensive report as outlined below:

Incident	Incident notification to PCU	Submission of report to PCU	Incident Notification to World Bank	Submission of report to World Bank
Fatality	24hrs	Within 5days	48hrs	Within 10 days
Medical Treatment case	Within three days	Within three days	Within four days	Within four days
Restricted work case	Within two days	Within two days	Within three days	Within Three days
First aid	weekly	weekly	weekly	weekly
Equipment damage	One day	Three days	Within four days	Within four days
Environmental incident	One day	Three days	Within four days	Within four days

The contractor's incident report to the Implementing agency shall contain as a minimum: -

- 1) The description of the incident including particulars of worker, equipment or environment damage
- 2) The description of the physical area where the incident occurred including lighting, weather
- 3) The actual activity that was ongoing prior to the accident
- 4) Direct and root causes
- 5) Corrective actions
- 6) A plan on how the corrective actions will be implemented including person responsible and timeline

- 7) Lesson learnt which shall be in a different template to be shared among the project team including the workers
- 8) The contractor shall be required to provide additional information with regard to the compensation status of the injured or in case of fatality the dependants

4.8.7 Definition of incidents

First Aid Case-Minor injury that is attended to and the employee resumes work.

Medical Treatment Case-A person injured in a work-related accident (including work related travel) that requires medical treatment(s) beyond first aid.

Lost Time Injury-A person injured in a work-related accident (including work related travel) that results in one or more days away from work after the day the accident occurred irrespective of whether or not this day is scheduled working day for the affected person.

Lost Time Injury Rate= (Lost time injury/Total Manhours) x 200,000

Restricted Work Case-A person injured in a work-related accident (including work related travel) that restricts the employee from doing the routine functions of his or her job or from working the full workday that he or she would have been scheduled to work after the day the accident occurred based on the recommendation of a physician, other licensed health care practitioner or by Bluewave International Services

Recordable Incident-Includes all fatalities(F), lost time injuries (LTI), restricted work cases (RWC) and medical treatment cases (MTC) by medical professionals; NB It does not include any first aid injury.

Total Recordable Injury Rate = (F+ LTI+ RWC +MTC/ Total Manhours) x200,000

Occupational Illness- any disease contracted primarily as a result of an exposure to risk factors arising from work activity

Equipment Damage-Any damage on equipment sustained on impact

Environmental incident- An environmental incident is an occurrence or set of circumstances, as a consequence of which pollution (air, water, noise, or land) or an adverse environmental impact has occurred

Dangerous Occurrence-Incidents that must be reported to the authorities. Dangerous Occurrence as defined by OSHA 2006 means a readily identifiable event, with potential to cause injury, or disease to persons at work or the public

4.8.8 Record keeping

The contractor shall maintain a report of all incidences and produce them upon request by the PCU team.

4.9 CONSULTATION AND COMMUNICATION

The contractor shall consult the NFA, UWA and PCU health and safety representative while making health and safety arrangements at the workplace in compliance with section 15 (2) of OSHA 2007 which states that it shall be the duty of every employer to consult a safety representative in the making and sustenance of arrangements, which enable the employer and the workers to cooperate effectively in promoting the development of measures to ensure the safety and health of employees. In addition, the contractor shall consult with workers organizations on matters pertaining to health and safety where applicable.

4.9.1 Posters and banners

The contractor shall plan for posters and banners to be displayed in the workplace as a means of creating awareness on health and safety. Due consideration shall be given to language used to ensure that all workers understand the message been passed across.

4.9.2 Signages

The contractor shall post and sensitive the workers on the signages in the workplace to caution workers on the hazards and risks present as well as provide information on the Dos and Don'ts in the project, information on welfare facilities and information on fire and emergency assembly point.

Mandatory Signs- states what must be done and shall be round with a blue background and white symbol

Prohibitory signs- states that something must not be done and shall be round with a white background and red border and cross bar. Symbols in black placed centrally on the background without obliterating the cross bar.

Safe condition signs - Indicate such safe conditions as a first-aid post or emergency evacuation route. They shall be square or oblong with white symbols on a green background.

Warning signs- They Warn of the presence of a particular hazard. They shall be triangular with a black border and a black pictogram on a yellow background.

Fire signages

Fall into two categories:

- Those providing information on means of escape and which take the form of a ‘Safe Condition’. They shall have a white pictorial on a green background
- Those identifying the location of fire equipment, e.g., ‘Alarm Point’, ‘Fire Extinguisher’. They shall have a white pictorial on a red background

4.9.3 Observation Cards

To improve on the health and safety behaviour of workers the contractors shall have an employee observation cards where all health and safety concern shall be captured by workers and collected for analysis and correction action.

4.9.4 Email

All contractors shall be required to provide a list of respective project manager and responsible persons for health and safety to the PCU to ensure that communication is done in a timely manner and to relevant persons. The PCU shall also ensure that their contacts and those of DLGs, NFA and UWA are provided to contractors to facilitate effective and timely communication.

4.9.5 Minutes of Meeting

There shall be a monthly meeting convened by the PCU which shall require health and safety representatives from NFA, UWA and health and safety contractors to be in attendance to undertake a review of health and safety management for the month. The meeting shall be convened every Tuesday on the first week of the month or any other day agreed by the site team within; the first week of the month.to review the previous month performance. The meeting shall include but not limited to: -

- 1) Review of Previous Minutes of Meeting (MoM)
- 2) Presentation of Health and safety performance

- 3) Presentation of Health and safety Audits
- 4) Presentation of Health and safety Corrective Action and Preventive Action (CAPA)
- 5) Presentation of Health and safety rewards

4.10 MONITORING, INSPECTION, AUDITING AND REPORTING

4.10.1 Health and Safety inspections

Inspection shall be part of monitoring and evaluation of project scope to measure the compliance level against project Occupational Health and Safety measures and legal requirements. This shall be carried out by the contractor's health and safety representative daily. The Project Implementation team shall from time to time undertake health and safety inspection of the contractor's workplace to ensure that works are undertaken in accordance with the project Occupational Health and Safety measures. NFA and UWA shall undertake inspections on a monthly basis.

4.10.2 Health and Safety Audits

Internal Audits shall be done on a quarterly basis by the PCU formal reports submitted to PCU team to check for compliance with GoU legal and regulatory framework, World Bank's Environmental and Social Standards, World Bank Group General Environmental Health and Safety Guidelines (WBG EHS Guidelines). All other statutory inspection and audits shall be complied with and the auditing fees shall be catered for by the contractors. If and when World bank may plans to undertake their own independent Audit the PCU team shall ensure adequate planning and facilitation.

4.10.3 Project Key performance indicators

IFPA-CD Project health and safety performance shall include leading and lagging indicators to give a comprehensive view on health and safety management. The PCU shall be in charge of coordinating and consolidating all the health and safety data from the various contractors and reporting on the overall performance. IFPA-CD Project health and safety performance indicators shall include but not limited to:

- 1) Number of safe manhours per week
- 2) Number of fatalities recorded
- 3) Number of lost time injuries

- 4) Number of medical treatment cases undertaken
- 5) Number of restricted work cases
- 6) Number of first aid injuries served
- 7) Total Recordable Injury rate
- 8) Lost time injury frequency rate
- 9) Number of compensable injuries
- 10) Cost of recorded injuries(in Uganda shillings)
- 11) Number of recorded accidents
- 12) Number of accidents investigated
- 13) Number of lessons learnt disseminated
- 14) Number of near miss recorded
- 15) Number of near misses investigated
- 16) Number of dangerous occurrences reported to DOSH
- 17) Number of Internal remedial reports issued
- 18) Number of internal non-conformance reports issued to contactors
- 19) Number of Inspections conducted by DOSH
- 20) Number of improvement notices issued by DOSH
- 21) Number of prohibited Notices issued by DOSH to contractors
- 22) Number of internal safety inspections conducted
- 23) Number of Risk Assessment conducted
- 24) Number of health and safety inductions conducted
- 25) Number of toolbox talks conducted
- 26) Number of workers medically examined
- 27) Number of persons rewarded on Health and Safety excellence
- 28) Number of persons penalized on Health and Safety violations
- 29) Number of health and safety complaints channeled through the workers' GRM
- 30) Number of sensitizations and training on HIV/AIDS/STIs undertaken

4.10.4 Non conformance

All non-compliances shall be issued by the PCU where it is ascertained that the contractor has failed to meet their obligation on health and safety matters. A non-conformance report shall be issued and logged in the project data after the contractor has failed to act on remedial actions issued by the PCU. The contractor shall be penalized when there is failure to justify why the non-conformance has not been addressed

4.10.5 Health and Safety penalties

The contractor shall be subjected to IFPA-CD disciplinary guide/policy aimed at addressing violations at site. The contents of the policy shall be shared with the contractor who shall be tasked with disseminating the information to the workers

The guide shall be clear on violation categories ranging from minor, moderate and major and disciplinary actions ranging from verbal warning, written warning and suspension or dismissal from work place. Police cases shall be handled in accordance with GoU Legislation and shall include but not limited to theft and assault

4.11 HEALTH AND SAFETY MEASURES REVIEW

The health and safety measures review shall be undertaken annually but may be undertaken prior to incorporate any changes in GoU legal and regulatory framework, World Bank's Environmental and Social Standards, World Bank Group General Environmental Health and Safety Guidelines (WBG EHS Guidelines).

4.12 PROJECT CLOSE OUT REPORT

The contractor shall be required to submit to the PCU team through the implementing agency a demobilization plan and final IFPA-CD project close out report.

4.13 IFPA-CD PROJECT BASELINE HAZARD IDENTIFICATION AND RISK ASSESSMENT

Component 1: Investments to improve the management of forests and protected areas				
No	Task	Hazards	Risk	Mitigation measures
1.1	<p>Improvement of infrastructure and equipment for the management of forest protected areas. Activities include Grading and maintenance of tracks and trails within protected areas to improve access for park management, Boundary planning and demarcation, infrastructure including gates and fences, equipment and activities to manage human wildlife including trenches and fences, investment in rangers housing, communications, vehicle and equipment, management plan revisions and updates</p>	<p>Heavy equipment including Heavy Equipment include excavator, motor graders, water bowser, roller, trucks)</p>	<p>Striking of people and collision with other equipment</p>	<ul style="list-style-type: none"> -Provision of equipment in good working condition -Pre inspection of equipment by driver/operator before start of work -All maintenance and repair works shall be undertaken by a competent authorized person -Provision of driver or operator from unauthorized carrying of persons or delegating his duties -Use of flagman when reversing -Training of operators and flagman -Use of headlights when there is poor visibility -Prohibition of drivers and operators from engaging in distracting activities while driving including mobile use and overreaching -Training employees on vehicle and equipment blind spots and avoidance -Equipment with Roll Over Protection and Falling Object protection -Pre employment medical examination shall be undertaken

			<ul style="list-style-type: none"> -Developing journey management plan -Information, Instruction, training and supervision of drivers and operators
	Equipment and tools rotating parts	<ul style="list-style-type: none"> Caught between equipment and objects Cuts, amputations 	<ul style="list-style-type: none"> -All maintenance work shall be done when equipment is in an off position and measures put in place to prevent inadvertent start up -Ignition keys shall be removed and kept in custody of the mechanic
	Open beds	<ul style="list-style-type: none"> Ridders falling off equipment and buckets 	<ul style="list-style-type: none"> -All personnel shall be prohibited from riding on open truck beds, excavator bucket, Crane hooks -Transportation of workers shall be done in line with
	Over speeding	<ul style="list-style-type: none"> Crush by overturning of equipment 	<ul style="list-style-type: none"> -All vehicles shall drive within the stipulated speed limits for the IFPA-CD project -Road maintenance to ensure they are in good condition -Information, Instruction, Training and supervision of drivers and operators
	Electrical contact	<ul style="list-style-type: none"> Shock Electrocution Burns Secondary effects of being 	<ul style="list-style-type: none"> -Where applicable, routes that have electric power lines crossing temporary loads will be avoided -Where avoidance is not possible the operators and drivers shall be expected to maintain the minimum clearance distance

		thrown and striking a surface	<ul style="list-style-type: none"> -All powered equipment shall be in good working condition free from any defects that would expose the worker to electricity -Electrical connections shall be to standard and done by a competent person -All clearance shall be observed from existing powerlines -Information, instruction, training and supervision shall be done on the dangers of substandard connections and ways to prevent them -Safe working procedures shall be developed for electrical works
	Failure of lifting mechanisms	Crushing by collapsing equipment parts	<ul style="list-style-type: none"> -Adequate maintenance schedule will be adhered to -All equipment shall be operated within their stipulated safe working loads (SWL) -No person shall be permitted to position themselves where there is a possibility of equipment collapse
	Incompetent drivers and operators leading to overturning due	Crushing Cuts and bruises death	<ul style="list-style-type: none"> -Recruitment of competent driver and operators with valid license -Imposing speed limits

		to over speeding, overloading improper steering and parking		-Prior training and awareness through health and safety induction and specific training -Use of stop blocks shall be mandatory when the vehicle is loading or offloading for prolonged periods of time
		Dust	Respiratory irritation	-Provision of suitable respiratory protective Equipment -Dust suppression by use of water
		Fumes	Asphyxiation and respiratory irritation from hazardous atmosphere	-Provision of appropriate respiratory equipment -Portable equipment producing fumes shall be stationed in a manner and position that does not lead to accumulation of fumes in the trenches -Adequate equipment preventive maintenance -Employment of competent welders -Provision of instruction, training and supervision on welding works -Implementation of a hot work permit

	welding sparks and molten slug	Burns, fires	<ul style="list-style-type: none"> -observing of housekeeping -Keeping all oily rags and other combustible materials away from the spark's paths - Fire extinguishers will be close to point where welding takes place in the event of a fire starting at the work station.
	Hot work pieces	Burns	<ul style="list-style-type: none"> -Information instruction training and supervision on powered tools -Observation of safety decals in place
	Unsafe handling of Gas cylinders	burns from fire and explosion, struck by propelling gas cylinder whose valve has been damaged	<ul style="list-style-type: none"> -Provision of adequate storage facility for gas cylinder storage with adequate ventilation -All gas cylinders while not in use shall be capped -Pre-inspection of the pressure valves, flexes and welding torch before use -Safe transportation of cylinder by use of gas trolley
	Manual Handling	<ul style="list-style-type: none"> -Musculoskeletal disorders including back pains and strains -Cuts and bruises 	<ul style="list-style-type: none"> -Information, training and supervision on safe manual handling by adopting ergonomically sound postures, coordinating lifting and having sight of where one is going -Mechanical lifting for heavy loads

		from sudden drop of loads due to loss of grip	-Ensure adequate housekeeping
	Rotating disk from Abrasive cut off machine	Cuts and amputation	-Only competent persons shall be permitted to use powered hand tools
	Noise from diesel powered generators and powered tools	Hearing impairment from prolonged exposure to high noise levels	-Adoption of engineering controls by provision of enclosure to muffle the noise -maintenance of equipment
	Cave-ins from Excavated trenches	Trapping and asphyxiation by Cave-ins from unprotected excavation walls	-Protection of the trenches shall be done to prevent sudden cave ins by adoption of battering, sloping, benching and support with trench and pile sheeting
	Unprotected edges	Struck by Falling objects and equipment from	-All excavated soil shall be stored one metre away from excavation edge

				<p>-All equipment and vehicles shall be position at a safe distance away from excavation edge and stop blocks shall be used</p> <p>-No employee shall be permitted to position oneself below any lifted loads</p>
		Water ingress which could emanate from heavy rains	Drowning from Flooded excavation	-Dewatering and inspection before proceeding with work
		Inadequate lighting	Collision, slips trips and falls from Poor or low light levels	<p>-Provisions for artificial shall be made to supplement natural lighting when inadequate due to poor visibility</p> <p>-Adequate housekeeping routines shall be observed</p>
		Open trenches	Bruises Fractures Falls	<p>-Trenches to be covered as soon as the foundations stones are in place</p> <p>-Use of barricading tapes to act as a caution for approaching</p> <p>-Safe bridges shall be provided across the trenches and employees shall be prohibited from jumping across</p>

		Vibration from hand held and guided compactors	Hand arm vibration syndrome	-Information, Instruction, Training and supervision will be conducted on use of handheld compactor tools
		Fragile roof materials	Risk of fall from height	-Assessment of roof conditions will be undertaken prior to workers accessing it to ensure it is free from damage and not fragile
		Contaminated work surfaces by water, oil and other contaminants	Slips and falls	-All contaminated surfaces shall be cleaned immediately
		Working at height	Fall from height Struck by falling objects	-All work at height shall be provided with adequate working platform -Ladders shall be used for access and not as working platform for long duration works -Employee shall be provided with a full body harness when working at height of 2 meters above the ground -Scaffolds shall be erected to standards by competent scaffolders, inspected and tagged before use

				<ul style="list-style-type: none"> -Pre use inspection of scaffolds, ladders and full body harness shall be done -Barricading of area below which work at height is ongoing -Developing safe working procedures for working at height -Implementation of work at height permit - Information, instruction, training and supervision shall be undertaken for all works at height
	Suspended loads	Crushed by falling loads Due to damaged lifting gear		<ul style="list-style-type: none"> -Safe working procedures on rigging and lifting shall be developed and shared -All lifting appliances, gears and machines shall be inspected in accordance to OSHA 2006 -All lifting equipment shall have the save working load indicated -Pre inspection of equipment by operator before use
	Oil spillages	Slips and falls		<ul style="list-style-type: none"> -Refueling at designated areas where fuel pump is provided -Mobile fuel tank if present on site should be equipped with drip trays and stop blocks. -Provision of drip trays where spills collect

				-If diesel or petrol is to be stored in jerricans they should be metallic
	Whole Body Vibrations	Headaches Motion sickness Chronic back pain Visual disturbance		-The choice of seat for the equipment shall be considered with equipment with suspension seat mist desirable -Regular maintenance of the equipment to ensure it is in good working order including the seat suspension -Exposure to vibration especially when using the roller shall be reduced by taking breaks -Training and awareness on ergonomics for the operator including correct seat adjustment, taking breaks, assuming correct posture during operation
	Wet concrete	Risk of skin dermatitis Risk of eye injury from concrete splatter		-Reducing contact with wet cement -Provision of personal protective equipment including eye protection, foot protection, body protection
	Steel fixing	Cuts and pricks Trips and falls		-Provision of appropriate PPEs including safety boots with steel toe cap, hand gloves, eye protection and aprons -Adequate housekeeping shall be observed by having designated area for material storage

				-Stacking of materials shall be done in a manner that will prevent sudden fall or blocked access ways
	Painting dust and mist	Respiratory irritation Skin dermatitis Eye injury		-Provision of appropriate respiratory protective equipment, body protection, eye protection and foot protection - Information, instruction, training and supervision shall be conducted on proper usage and maintenance -Adequate ventilation shall be provide to prevent accumulation of dust and mist in the work areas
	Inadequate lighting	Risk of attack		Provision shall be made for adequate lighting for night shift works
	Heat	Dehydration		-Adequate supply of drinking water -Shade to be provided for workers located in a temporary workshop to guard against continuous exposure to weather elements including sun and rain
	Struck by Hand tools	Puncture injuries Blunt force trauma		-A safe distance shall be observed between workers to avoid them from sticking each other -All hand tools shall be in good working order free from defects and accessories adequately attached

	Poor housekeeping	Trips and fall Bruises	-All work areas shall observe adequate housekeeping ensuring all materials are cleared from work place at the end of a work shift -Adequate storage place shall be provided to ensure adequate sticking of materials
	Sexual intercourse, contact with contaminated blood	HIV/AIDs and other Sexually Transmitted Infections (STIs)	-undertaking awareness and training on modes of infection, management when infected and voluntary counselling and testing clinics organized from time to time -Provision of condoms -First aiders will be required to use surgical gloves when attending to bleeding workers
	Labour influx	Exploitation of the vulnerable rural poor COVID 19 infection	-Provision of job opportunities without discrimination -Provision of a free and transparent recruitment process -Signing of and adhering to workers' code of conduct. -Project COVID 19 procedures shall be adhered to
	Social conflict	Injuries from violence and aggression	-Creating awareness among all stakeholders -Provision of a reporting mechanism for any aggrieved party -Signing of and adhering to workers' code of conduct.

		SARS-CoV-2	Exposure and Transmission of SARS-CoV-2 resulting to COVID 19	<ul style="list-style-type: none"> -Physical distancing shall be observed -Routine screening of workers -Regular disinfection of workplaces at site -Observing of good hygiene practices including hand washing -Provision and appropriate use of Personal Protective Equipment
1.2	Increasing access to and benefit from forest and wildlife protected areas for local communities	Attack by wild animals	Injuries death	Creating awareness on prevention from wildlife attacks
1.3	Restoration of degraded natural forest habitats in forest reserves Establishment and maintenance of fire breaks Construction of fire towers, equipment for firefighting and fire avoidance	Use of pesticides during planting	Skin irritation Eye irritation Respiratory irritation	<ul style="list-style-type: none"> -Provision of adequate PPES -Ensure availability of MSD and adherence to instructions -Provision of first aid facilities in case of skin or eye contact -Provide information instruction, training and supervision on application and storage -Adhere to proper waste management of emptied containers -Provision of adequate storage facilities with appropriate signages

				<ul style="list-style-type: none"> -Provision of washing facilities for workers involved with use of pesticide application -Where possible storing minimum quantities of the pesticides -Access to be restricted to authorized person
1.4	Increased forest protection in CFRs and WRs in close proximity to refugee settlements including Community livelihood activities	Bees	Attack that may result to anaphylactic shock and death from Bee stings	<ul style="list-style-type: none"> -Information, instruction, training and supervision of beehives construction and installation and harvesting -Training on first aid for bee stings Training on personal protective equipment when harvesting

including beekeeping and wild mushroom growing Removal of invasive species Forest restoration Improvement of basic protected area management including communication and other equipment, vehicle, ranger post, essential infrastructure Wildlife management including fire observation towers and equipment Boundary demarcation	Use of pesticides during planting Use of pesticides during planting	Respiratory irritation Skin irritation Eye irritation	-Provision of adequate PPES -Provision of first aid facilities in case of skin or eye contact -Provide information instruction, training and supervision on application and storage -Adhere to proper waste management of emptied containers -Provision of adequate storage facilities with appropriate signages -Provision of washing facilities for workers involved with use of pesticide application -Where possible storing minimum quantities of the pesticides -Access to be restricted to authorized person
	Working at height	Fall from height Struck by falling objects	-All work at height shall be provided with adequate working platform -Ladders shall be used for access and not as working platform for long duration works -Employee shall be provided with a full body harness when working at height of 2 meters above the ground

				<ul style="list-style-type: none"> -Scaffolds shall be erected to standards by competent scaffolders, inspected and tagged before use -Pre use inspection of scaffolds, ladders and full body harness shall be done -Barricading of area below which work at height is ongoing -Developing safe working procedures for working at height -Implementation of work at height permit - Information, instruction, training and supervision shall be undertaken for all works at height
		Electricity	Shock, burns and electrocution	<ul style="list-style-type: none"> -All powered equipment shall be in good working condition free from any defects that would expose the worker to electricity -Electrical connections shall be to standard and done by a competent person -All clearance shall be observed from existing powerlines -Information, instruction, training and supervision shall be done on the dangers of substandard connections and ways to prevent them

				-Safe working procedures shall be developed for electrical works
		Dust	Respiratory irritation	-Provision of suitable respiratory protective Equipment -Dust suppression by use of water
		Fumes	Asphyxiation and respiratory irritation from hazardous atmosphere	-Provision of appropriate respiratory equipment -Portable equipment producing fumes shall be stationed in a manner and position that does not lead to accumulation of fumes in the trenches -Adequate equipment preventive maintenance -Employment of competent welders -Provision of instruction, training and supervision on welding works -Implementation of a hot work permit
		Wet concrete	Risk of skin dermatitis Risk of eye injury from concrete splatter	-Reducing contact with wet cement -Provision of personal protective equipment including eye protection, foot protection, body protection

		Steel fixing	Cuts and pricks Trips and falls	-Provision of appropriate PPEs including safety boots with steel toe cap, hand gloves, eye protection and aprons -Adequate housekeeping shall be observed by having designated area for material storage -Stacking of materials shall be done in a manner that will prevent sudden fall or blocked access ways
		Painting dust and mist	Respiratory irritation Skin dermatitis Eye injury	-Provision of appropriate respiratory protective equipment, body protection, eye protection and foot protection - Information, instruction, training and supervision shall be conducted on proper usage and maintenance -Adequate ventilation shall be provide to prevent accumulation of dust and mist in the work areas
		Work at Height	Fall from height	The tower shall de design and constructed with adequate edge protection to prevent falls
		Inadequate lighting	Risk of attack	Provision shall be made for adequate lighting for night shift works
		Access to tower	Risk of Trip and falls	Adequate and safe means of access to the tower shall be factored in design and construction

		Cold weather	Risk of colds and f lues	Provision of adequate protective Equipment to guard against cold weather
		Heat	Dehydration	Adequate supply of drinking water
		Poor housekeeping	Trips and fall Bruises	-All work areas shall observe adequate housekeeping ensuring all materials are cleared from work place at the end of a work ship -Adequate storage place shall be provided to ensure adequate sticking of materials
		Sexual intercourse, contact with contaminated blood	HIV/AIDs infection and STIs	-undertaking awareness and training on modes of infection, management when infected and voluntary counselling and testing clinics organized from time to time -Provision of condoms -First aiders will be required to use surgical gloves when attending to bleeding workers
		Labour influx	Exploitation of the vulnerable rural poor COVID 19 Infection	-Provision of job opportunities without discrimination -Provision of a free and transparent recruitment process -Signing of and adhering to workers' code of conduct. - Project COVID 19 procedures shall be adhered to

		Social conflict	Injuries from violence and aggression	-Creating awareness among all stakeholders -Provision of a reporting mechanism for any aggrieved party. -Signing of and adhering to workers' code of conduct.
Component 2: Investments to increase revenues and jobs from forests and wildlife protected areas				
No	Task	Hazards	Risk	Mitigation measures

2.1	Investment in tourism infrastructure and products in select NPs and CFRs Development of picnic sites, canopy walks, hiking trails, jetties, zip lines, bird hides, student centers, visitor centers, visitor gates, tracks , trails, bridges, board walks	Working at height	Fall from height Struck by falling objects	-All work at height shall be provided with adequate working platform -Ladders shall be used for access and not as working platform for long duration works -Employee shall be provided with a full body harness when working at height of 2 meters above the ground -Scaffolds shall be erected to standards by competent scaffolders, inspected and tagged before use -Pre use inspection of scaffolds, ladders and full body harness shall be done -Barricading of area below which work at height is ongoing -Developing safe working procedures for working at height -Implementation of work at height permit - Information, instruction, training and supervision shall be undertaken for all works at height
-----	--	-------------------	---	---

		Electricity	Shock, burns and electrocution	<p>-All powered equipment shall be in good working condition free from any defects that would expose the worker to electricity</p> <p>-Electrical connections shall be to standard and done by a competent person</p> <p>-All clearance shall be observed from existing powerlines</p> <p>-Information, instruction, training and supervision shall be done on the dangers of substandard connections and ways to prevent them</p> <p>-Safe working procedures shall be developed for electrical works</p>
		Dust	Respiratory irritation	<p>-Provision of suitable respiratory protective Equipment</p> <p>-Dust suppression by use of water</p>
		Fumes	Asphyxiation and respiratory irritation from	<p>-Provision of appropriate respiratory equipment</p> <p>-Portable equipment producing fumes shall be stationed in a manner and position that does not lead to accumulation of fumes in the trenches</p>

		hazardous atmosphere	<ul style="list-style-type: none"> -Adequate equipment preventive maintenance -Employment of competent welders -Provision of instruction, training and supervision on welding works -Implementation of a hot work permit
	Wet concrete	<p>Risk of skin dermatitis</p> <p>Risk of eye injury from concrete splatter</p>	<ul style="list-style-type: none"> -Reducing contact with wet cement -Provision of personal protective equipment including eye protection, foot protection, body protection
	Steel fixing	<p>Cuts and pricks</p> <p>Trips and falls</p>	<ul style="list-style-type: none"> -Provision of appropriate PPEs including safety boots with steel toe cap, hand gloves, eye protection and aprons -Adequate housekeeping shall be observed by having designated area for material storage -Stacking of materials shall be done in a manner that will prevent sudden fall or blocked access ways

	Painting dust and mist	Respiratory irritation Skin dermatitis Eye injury	-Provision of appropriate respiratory protective equipment, body protection, eye protection and foot protection - Information, instruction, training and supervision shall be conducted on proper usage and maintenance -Adequate ventilation shall be provide to prevent accumulation of dust and mist in the work areas
	Cold weather	colds and f lues	Provision of adequate protective Equipment to guard against cold weather
	Heat	Dehydration	Adequate supply of drinking water
	Poor housekeeping	Trips and fall Bruises	-All work areas shall observe adequate housekeeping ensuring all materials are cleared from work place at the end of a work ship -Adequate storage place shall be provided to ensure adequate sticking of materials
	Sexual intercourse, contact with contaminated blood	HIV/AIDs infection and STIs	-undertaking awareness and training on modes of infection, management when infected and voluntary counselling and testing clinics organized from time to time -Provision of condoms

			<ul style="list-style-type: none"> -First aiders will be required to use surgical gloves when attending to bleeding workers -Signing of and adhering to workers' code of conduct.
	Labour influx	Exploitation of the vulnerable rural poor COVID 19 infection	<ul style="list-style-type: none"> -Provision of job opportunities without discrimination -Provision of a free and transparent recruitment process -Signing of and adhering to workers' code of conduct. -Project COVID 19 procedures shall be adhered to
	Social conflict	Injuries from violence and aggression	<ul style="list-style-type: none"> -Creating awareness among all stakeholders -Provision of a reporting mechanism for any aggrieved party -Signing of and adhering to workers' code of conduct.
	Bees	Attack that may result to anaphylactic shock and death from Bee stings	<ul style="list-style-type: none"> -Information, instruction, training and supervision of beehives construction and installation and harvesting -Training on first aid for bee stings Training on personal protective equipment when harvesting
	Use of pesticides during planting Use of pesticides during planting	Respiratory irritation Skin irritation Eye irritation	<ul style="list-style-type: none"> -Provision of adequate PPES -Provision of first aid facilities in case of skin or eye contact

				<ul style="list-style-type: none"> -Provide information instruction, training and supervision on application and storage -Adhere to proper waste management of emptied containers -Provision of adequate storage facilities with appropriate signages -Provision of washing facilities for workers involved with use of pesticide application -Where possible storing minimum quantities of the pesticides -Access to be restricted to authorized person
		Working at height	Fall from height Struck by falling objects	<ul style="list-style-type: none"> -All work at height shall be provided with adequate working platform -Ladders shall be used for access and not as working platform for long duration works -Employee shall be provided with a full body harness when working at height of 2 meters above the ground -Scaffolds shall be erected to standards by competent scaffolders, inspected and tagged before use -Pre use inspection of scaffolds, ladders and full body harness shall be done

				<ul style="list-style-type: none"> -Barricading of area below which work at height is ongoing -Developing safe working procedures for working at height -Implementation of work at height permit - Information, instruction, training and supervision shall be undertaken for all works at height
		Electricity	Shock, burns and electrocution	<ul style="list-style-type: none"> -All powered equipment shall be in good working condition free from any defects that would expose the worker to electricity -Electrical connections shall be to standard and done by a competent person -All clearance shall be observed from existing powerlines -Information, instruction, training and supervision shall be done on the dangers of substandard connections and ways to prevent them -Safe working procedures shall be developed for electrical works
		Dust	Respiratory irritation	-Provision of suitable respiratory protective Equipment

				-Dust suppression by use of water
		Fumes	Asphyxiation and respiratory irritation from hazardous atmosphere	-Provision of appropriate respiratory equipment -Portable equipment producing fumes shall be stationed in a manner and position that does not lead to accumulation of fumes in the trenches -Adequate equipment preventive maintenance -Employment of competent welders -Provision of instruction, training and supervision on welding works -Implementation of a hot work permit
		Wet concrete	Risk of skin dermatitis Risk of eye injury from concrete splatter	-Reducing contact with wet cement -Provision of personal protective equipment including eye protection, foot protection, body protection
2.2	Investment in productive forestry including planting trees	Harvesting tree products	Struck or crashed by falling trees	-Developing of safe working procedures for felling trees -Engaging competent personnel -Providing information, instruction, training and supervision

		Wild animals	Attack from wild animals -Coordination with the forest rangers to ensure that wild animals are at a safe distance -training and awareness on animal territories and behaviour that would make them defensive
		Electric Powered tools	Shock and electrocution -Develop Safe operating procedures for powered tools -Information, instruction, training and supervision -Only Competent person should be allowed to use electric powered tools -training and awareness on responding to electric shocks -All equipment shall be in good working order including guarding, on and off button, emergency stop, controls and signages
		Cuts, draw in, entanglement and amputations	-All rotating parts shall be guarded -Loose clothing shall not be allowed within the machinery area
		Burns from Fire	-Provision of fire extinguisher

				-instruction, Information, Training and supervision on fire safety
		Petrol/ diesel-powered tools	Burns from hot surfaces	-Refueling shall be done when the equipment is off -Fuels shall be stored in metallic containers with a lid and away from fire sources -Equipment shall not be left unattended while running
			Burns from fires	
			Injury to the eye from wood dust and pieces of wood	

Component 3: Improved tree cover, forest management and landscape resilience on private and customary lang including refugee host areas

No	Task	Hazards	Risk	Mitigation measures
1	Seedling planting in nurseries	Chemical substances including Pesticides	-Eye irritation -Respiratory irritation including sneezing, coughing, sore throat,	-Elimination by avoiding use of chemicals where other alternatives are present including biological control and removal of all affected materials in nurseries -Provision of adequate and appropriate PPES when handling chemicals -Making known the contents of the safety data sheet to all workers involved in handling chemicals

		<p>Wheezing, coughing, shortness of breath and Lung cancer due to chest and Lung damage</p> <p>-Nausea, vomiting, stomach ache and diarrhoea</p> <p>Lack of sleep and loss of coordination when nervous system is affected</p> <p>Skin irritation</p> <p>Dizziness and headaches</p>	<p>-Provision of first aid facilities in case of skin or eye contact such as eye wash</p> <p>-Provide information, instruction, training and supervision on application and storage</p> <p>-Adhere to proper waste management of emptied containers and obsolete chemicals through incineration an approved waste incineration plant</p> <p>-Provision of adequate storage facilities with appropriate signages</p> <p>-Provision of washing facilities for workers involved with use of pesticide application</p> <p>-Where possible storing minimum quantities of the pesticides</p> <p>-Access to be restricted to authorized person</p>
	Attack from wild animals	Injuries death	-Employees shall be required to be at their location of work

		including elephants, crocodiles, hippos and lions		-In case of a strayed animal the relevant authority will be called upon to capture and release the animals to their habitats -Employee shall desist from provoking animals
		Repetitive motions, Assuming awkward work position, use of excessive force, lifting of heavy loads,	Musculoskeletal Disorders	-Training of employees on adopting correct work posture -Employee shall take frequent breaks -Provide IITS on mitigating against musculoskeletal Disorders -Heavy loads shall be transported by use of mechanical aids -Materials shall be stacked in a manner that they are easily reachable
		Inadequate housekeeping	Trips and falls, cuts and bruises	-Adequate housekeeping shall be done on a daily basis to ensure a clean and accessible work area -All access routes to the work areas shall be free of obstructions
Component 4: Project Management and Monitoring				
1	Management and Monitoring	Project vehicles	Injuries and death from road traffic accidents	-Competent drivers shall be recruited and undertaken through health and safety training

				<p>-The driver shall be required to maintain proper housekeeping for the vehicle</p> <p>-It shall be a requirement for all personnel to buckle the seat belt prior to a journey</p> <p>-The driver shall be prohibited from engaging in distracting activities including smoking and mobile phone use</p> <p>-The driver shall undertake daily inspection of the vehicle and report any defects observed.</p> <p>-No driver shall be allowed to work beyond the stipulated working hours to guard on fatigue and lack of sleep</p> <p>-Scheduled maintenance shall be adhered to</p>
		Civil unrest	Injuries from attacks	-Project management team shall be required to exit the work place if they have enough conviction, they are not safe
		Biological	Attack from bees and wild animals	<p>-Training on self-awareness to adequately identify wild animals</p> <p>-Restrict movements to the work areas</p>

