



## **Section VII - 2C: ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY (ESHS) REQUIREMENTS**

## LIST OF ABBREVIATIONS

CESMOP	Construction Environmental and Social Monitoring Plan
CESMP	Construction Environmental and Social Management Plan.
DOSHS	Directorate of Occupational Safety and Health Services
E&S	Environmental and Social
EHS	Environment, Health and Safety
EMCA	Environmental Management and Coordination Act
ESHS	Environmental and Social Health and Safety
ESIA	Environmental Social Impact Assessment
ESMoP	Environmental and Social Monitoring Plan
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social System
GBV	Gender Based Violence
HSMP	Health and Safety Management Plan
HSMR	Health and Safety Monthly Report
KETRACO	Kenya Electricity Transmission Company Ltd
KFS	Kenya Forestry Services
KWS	Kenya Wildlife Services
MEAS	Multilateral Environmental Agreements
NEMA	National Environment Management Authority
NHIF	National Health Insurance Fund
NMK	National Museums of Kenya
NSSF	National Social Security Fund
OSHA	Occupational Health and Safety Act
PPE	Personal Protective Equipment
SEA	Sexual Exploitation and Abuse
SH	Sexual Harassment
WB	World Bank
WIBA	Work Injury Benefits Act
WRA	Water Resources Authority

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## **1 GENERAL PROVISIONS**

This document is in line with the Environmental and Social Commitment Plan (ESCP) of the Kenya Green and Resilient Expansion of Energy (GREEN) Program Phase 2 Project (the Project).

Environmental, Social, Health, and Safety (ESHS) risks in the contracting process are most effectively addressed by integrating the risk management requirements of the contractor into the contract. Following the project development & implementation risk assessment process, contractors should identify the risk management measures that will be demanded of the contractor, formalize these as “Contractor Management Plans” or “Contractor ESHS Requirements” and integrate these plans into the procurement process. The Contractor Management Plans or Contractor ESHS Requirements should describe in a comprehensive and structured manner the various ESHS considerations, controls, and commitments related to the main activities that the contractor will be required to implement as part of its scope of work.

They should include all relevant ESHS requirements, commitments, and provisions derived from the various source documents (e.g., ESHS policies, regulatory requirements, ESHS commitment registers, Environmental and Social Impact Assessment (ESIA) documentation, supplemental assessments, etc.) and it should be an integral part of the contract. These plans help improve the contractor’s understanding of the ESHS requirements and provide an overall framework of the client’s expectations on ESHS matters. With a better understanding of these, the contractor can determine from the onset the resources and related associated costs that will be required for executing the work. As a result, the bidding process, the selection of the contractor, the contract, and the execution of the work itself will include the client’s (and project’s) ESHS considerations from the outset.

By including all relevant provisions in these documents, and by making the Contractor Management Plans and/or the Contractor ESHS Requirements document an integral part of the main contract, Kenya Electricity Transmission Company Ltd (KETRACO) will have better tools to manage the ESHS performance of their contractors and will be in a better position to adequately control and mitigate the identified risks and impacts of the project or activity. The contractor selection/evaluation process should involve a multidisciplinary team, with one or more qualified ESHS professionals responsible for the project’s ESHS-related aspects, including ESHS performance, worker, and community health.

The Contractor is an integral part of KETRACO’s mission, vision, and collaborative teamwork approach towards achieving project success within defined timelines. In support of this alignment, the Contractor shall take necessary measures to ensure that each member of the Contractor’s personnel is well-versed in the code of conduct, including prohibited behaviours, and comprehends the consequences of engaging in such prohibited actions.

### **1.1 Contractor Environmental, Social, Health, and Safety Commitments**

In pursuit of project efficiency and economy, the Contractor is obligated to prevent, minimize, or mitigate environmental, social, health, and safety damages throughout all project activities. Operations shall be conducted in a manner that preserves the natural landscape, avoiding unnecessary destruction or scarring, as stipulated in the project’s ESIA report and its Environmental and Social Management Plan (ESMP).

All trees, saplings, and shrubbery, unless required for permanent works, shall be protected from unnecessary damage, and prompt relocation, replanting, or restoration shall occur after unavoidable damage. The Contractor's facilities, including warehouses, labour camps, and storage areas, shall be planned and located to maximize preservation of the natural environment. Post-project, these facilities

shall either serve as permanent residences or be dismantled, restoring the area to quasi-original conditions.

The Contractor assumes responsibility for acquiring necessary approvals for associated and ancillary facilities not covered in the project's ESIA reports.

### **1.1.1 Compliance with Environmental and Social Management Plans**

The Contractor commits to full compliance with the following plans for the works under their responsibility:

1. Employer's Environmental and Social Management Plan (ESMP)
2. Environmental and Social Monitoring Plan (ESMoP)
3. Contractor's Construction Environmental and Social Management Plan (CESMP)
4. Construction Environmental and Social Monitoring Plan (CESMoP)
5. Contractor's Occupational and Community Health and Safety Management Plan (HSMP)

### **1.1.2 Compliance with Legislative Framework and Institutions.**

The Contractor is obligated to comply with various national policies, legislations, and international guidelines outlined in the WB ESS, as well as ratified Multilateral Environmental Agreements (MEAs). These regulations are crucial for safeguarding the environment and socioeconomic fabric. The Contractor is required to collaborate closely with key institutions and departments in Kenya dealing with environmental and social matters. These include but are not limited to the National Environment Management Authority (NEMA), Kenya Forestry Services (KFS), Kenya Wildlife Services (KWS), National Museums of Kenya (NMK), Water Resources Authority (WRA), Directorate of Occupational Safety and Health Services (DOSHS), respective County Governments as well as state departments of social protection and mines and geology.

The Contractor shall work collaboratively with these institutions to obtain necessary standards, approvals, and permits, ensuring adherence to legislations such as:

- The Constitution of Kenya, 2010
- The Environment Management and Coordination Act (EMCA), 1999 (and related regulations per the ESIA report)
- Energy Act, 2019
- Employment Act, 2007
- Occupational Safety and Health Act (OSHA), 2007
- Public Health Act (Cap. 242)
- The Forest Conservation and Management Act, 2016
- The Lakes and Rivers Act Section 409 Laws of Kenya
- The Traffic Act Section 403
- The Land Act, 2012
- The Wildlife Conservation and Management Act, 2013
- Water Act, 2016

### 1.1.3 Cost of Compliance

Compliance with the plans is considered integral to standard good workmanship and state-of-the-art practices required under the contract. The cost for compliance is covered under the "Environmental Protection" item in the Bill of Quantities.

The Contractor is liable for all damages to natural resources caused by the execution of the Works, or the methods used for execution, unless it is established that the execution or methods were necessary, according to the provisions of the Contract.

**Subcontractors:** The ESHS Specifications apply to the Contractor and unless explicitly agreed with the Project Manager, all Subcontractors shall use the same for the execution of the Works.

The Contractor is fully liable for all actions, non-compliance and negligence by Subcontractors, their representatives, suppliers, employees, and workers, to the same degree as it would be held liable for its own actions, non-compliance, or negligence.

## 1.2 Contractor's ESHS Management System.

### 1.2.1 ESHS Planning

- a) The Contractor prepares a CESMP and ensures prior validation by KETRACO, implementation, and regular update.
- b) The CESMP represents the unique reference document in which the Contractor defines in detail all organizational and technical provisions implemented to satisfy the obligations of the ESHS Specifications.
- c) The CESMP covers the entire period from the Contract Agreement.
- d) The CESMP is written in English as the language of communication.
- e) The first draft version of the CESMP is to be provided by the Contractor to the KETRACO Environmental Safeguards & Sustainability (ESS) Division within **28 days** from the date of execution of the Contract Agreement.
- f) No construction work shall commence on any Project Area until such time the CESMP, corresponding to the Project Area, are approved by KETRACO.
- g) During the execution of the Works, whenever instructed by the Project Manager, the CESMP will be updated by the Contractor and reissued to the Project Manager. The revised version shall highlight the new elements incorporated in the document.

### 1.2.2 Development and Approval of Plans

The Contractor shall develop the CESMP and CESMoP based on KETRACO's ESMP and ESMoP developed during the undertaking of ESIA. Submission of the CESMP and CESMoP for review and approval by KETRACO is required **within 28 days after contract signing**. The Contractor shall comply with and implement all parts of the approved plans, and mitigate unforeseen impacts not covered in KETRACO's ESMP and ESMoP.



### **1.2.3 Development and Approval of HSMP**

Within 28 days after signing of the contract, the Contractor shall prepare an Occupational and Community HSMP for the adequate management of health and safety during construction. Other than managing occupational safety and health risks, the HSMP should assess and manage specific risks and impacts to the community arising from Project activities including, inter alia, behaviour of Project workers, risks of labour influx, response to emergency situations, and include mitigation measures in the sub project ESIAs/ESMPs. The HSMP will be reviewed and approved by the KETRACO before the start of works. The HSMP will serve as an internal operational manual for the Contractor and as a basis for KETRACO monitoring the Contractor's HS performance.

### **1.2.4 Action Plan**

Prior to commencing construction, the Contractor shall prepare an Action Plan for the approved plans, including subsidiary plans like Waste Management Plan, Emergency Preparedness and Response Plan, Oil Spill Contingency Plan, etc. The action plan, detailing how the requirements will be achieved, must obtain approval from KETRACO. The Contractor shall implement the action plan during construction, with monitoring by the Project Manager and reporting to KETRACO ESS Division. Any significant non-compliance will result in necessary actions taken by KETRACO to rectify the situation.

### **1.3 Key Contractors' ESHS officer**

The Contractor shall establish and maintain an organizational structure each, with qualified staff and resources to support management of ESHS risks and impacts of the Project. The Contractor is entrusted with the responsibility of assigning a qualified and adequate team to carry out monitoring and reporting tasks according to the stipulations in this Section, including as a minimum: a health and safety expert, an environmental risks management expert and a social risks management expert. The management and oversight of activities under this Section will be led by an Environment, Health and Safety (EHS) officer.

#### **The responsibilities of the EHS officer will be as follows:**

- Develop and implement comprehensive ESHS strategies aligned with project goals and international best practices.
- Ensure integration of ESHS considerations into overall project planning and decision-making processes.
- Stay informed about relevant environmental, social, health, and safety regulations and ensure the project's compliance with local and international standards.
- Lead and manage the ESHS team, providing guidance and support to ensure effective implementation of ESHS plans and initiatives.
- Engage with internal and external stakeholders, including regulatory bodies, local communities, and project teams, to address concerns, share information, and build positive relationships.
- Conduct comprehensive risk assessments related to environmental, social, health, and safety aspects and develop effective risk management strategies.
- Develop and conduct training programs for project staff and contractors to enhance understanding and adherence to ESHS protocols and standards.
- Establish robust monitoring systems for ESHS performance throughout the project lifecycle.
- Prepare regular reports detailing ESHS metrics, compliance status, and any incidents, and submit them to relevant stakeholders.
- Implement and monitor health and safety programs, ensuring compliance with regulations and the promotion of a safe working environment.

- Promote a culture of continuous improvement by staying updated on emerging trends, technologies, and best practices in ESHS management.
- Develop and implement crisis management plans for potential environmental, social, health, and safety incidents, ensuring swift and effective response.
- Ensure transparent reporting on ESHS matters to relevant authorities, project teams, and the public, demonstrating commitment to accountability and responsibility.
- Ensuring the implementation of safety measures and procedures outlined in the Health and Safety Management Plan (HSMP), with a focus on preventing accidents and injuries.
- Conducting safety awareness programs, including toolbox talks and training sessions, to educate the workforce on safety practices and procedures.
- Developing and implementing emergency response plans to address accidental releases, spills, or any unforeseen environmental incidents, including clear procedures for immediate response and containment.
- Performing daily or at least weekly site inspections to identify potential safety hazards, assess the effectiveness of safety measures, and ensure compliance with safety regulations.
- Preparing the Health and Safety Monthly Report (HSMR), documenting monitoring results, interpreting findings, and outlining actions taken in response to safety issues.
- Ensuring compliance with traffic safety requirements for the operation of work, including safe transportation practices and traffic management.
- Implementing measures to prevent excessive noise and vibration during construction activities, including compliance with local regulations and guidelines.
- Conducting regular safety training sessions and drills for the workforce to enhance their preparedness for emergency situations and ensure a culture of safety on the construction site.
- Regularly inspecting and ensuring the availability and proper functioning of safety equipment, personal protective equipment (PPE), and emergency response tools.
- Maintaining detailed documentation of safety-related activities, incidents, and interventions, and providing timely reports to the project management team.

**The qualifications of the EHS officer will be as follows:**

- Bachelor's degree in environmental science, Environmental Management, or a related field.
- Minimum of 4 years of experience in environmental and social management the infrastructure sector with preference on energy infrastructure.
- Strong understanding of environmental, social, Health and Safety regulations, with a proven track record in managing such aspects in large projects.
- Professional certification in occupational health and safety (e.g., DOSHS or NEBOSH).
- Strong understanding of international best practices in EHS management and a proven track record in implementing them in large projects.
- Familiarity with relevant international standards & frameworks and the World Bank ESS.
- Excellent negotiation and conflict resolution skills for dealing with complex environmental, social, Health and Safety issues.
- In-depth knowledge of risk assessment methodologies and the ability to develop and implement effective risk management strategies.
- Strong analytical and problem-solving skills, with the ability to make informed decisions under pressure.
- Demonstrated commitment to sustainability and corporate social responsibility, with experience integrating these principles into project management.
- Proven experience in conducting hazard assessments, safety audits, and incident investigations.
- Strong communication skills to facilitate effective safety training programs and promote a culture of safety within the workforce.

- Proficiency in using Environmental, Social, Health, and Safety assessment tools.

## 2 TRAINING OF CONTRACTOR'S AND SUBCONTRACTORS' PERSONNEL

### 2.1 Training Responsibility

KETRACO or their designated personnel, including the Project Manager, shall supervise and monitor training sessions done by Contractor's and Subcontractors' Personnel.

The Contractor is responsible for coordinating the attendance of their personnel and ensuring compliance with the training requirements.

The contractor should ensure that the following training are offered to their staff and workers either as individual trainings or as a blend where possible and in a manner as prescribed by applicable national statutes such as EMCA, OSHA, among others.

### 2.2 General Training Requirements

The Contractor shall ensure that relevant personnel, including subcontractors, receive comprehensive training on environmental, health, and safety, social and cultural aspects.

Training programs shall be designed to enhance awareness and understanding of the environmental, health, safety, social and cultural considerations associated with the project.

**Table 1 : Summary of key training areas to be covered by the contractor.**

Training	Area of Focus	Applicable Statute
Health & Safety	<ul style="list-style-type: none"><li>• Understanding the importance of a safe work environment.</li><li>• Identifying potential health hazards and safety risks.</li><li>• Procedures for responding to accidents, spills, and other emergencies.</li><li>• Safety and health committee operation</li><li>• Fire safety training.</li><li>• First aid training</li><li>• Work at height training</li><li>• Safe use and handling of hazardous substances training</li><li>• Traffic and road safety</li><li>• Reporting mechanisms for incidents related to EHS and environmental issues.</li></ul>	Occupational Health and Safety Act, 2007 and applicable Rules  - Safety and Health Committees Rules, 2004 - Fire Risk Reduction Rules 2007' - Hazardous Substances Rules, 2007 - First Aid Regulations, 2023
Noise and Excessive Vibration Management	<ul style="list-style-type: none"><li>• Noise and excessive vibrations mapping</li><li>• Noise and excessive vibrations management</li></ul>	Noise and Excessive vibrations regulations
Integrated Waste Management	<ul style="list-style-type: none"><li>• Proper waste management of construction waste with a focus on reuse, recycling, and repair.</li><li>• Proper disposal of waste</li></ul>	Integrated Solid Waste Management Act, 2022

Training	Area of Focus	Applicable Statute
		The Waste Management Regulations of 2006
Water and Air Quality Control	<ul style="list-style-type: none"> <li>• Proper use and conservation of water resources and protection of the existing resources</li> <li>• Techniques for minimizing air emissions and maintaining air quality at the site and in areas where projects are close to identified stimuli in the ESIA report(s)</li> </ul>	Water Quality Regulations of 2006  Air Quality Regulations of 2014.
Specific Training Modules: a. HIV/AIDS Awareness Training	<ul style="list-style-type: none"> <li>• The Contractor shall ensure that all project personnel receive training on HIV/AIDS awareness, including prevention, stigma reduction, and support for affected individuals.</li> </ul>	HIV /AIDS Prevention and Control Act, 2006
Cultural Sensitivity, Archaeological and Community Engagement	<ul style="list-style-type: none"> <li>• Recognizing and respecting local cultures and traditions.</li> <li>• Effective communication strategies for engaging with local communities.</li> <li>• Chance Find procedures.</li> </ul>	National Museums and Heritage Act (Cap 216)
Gender Sensitivity, Diversity and Inclusion	<ul style="list-style-type: none"> <li>• Promoting gender equality in the workplace.</li> <li>• Creating an inclusive work environment that respects diversity.</li> <li>• Gender Based Violence (GBV), Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH)</li> <li>• Grievance Redress Mechanism for reporting incidences.</li> </ul>	The National Gender and Equality Commission Act, 2011
Complaints and Grievance Handling	<ul style="list-style-type: none"> <li>• Procedures for handling and addressing complaints and grievances related to environmental and social issues.</li> </ul>	Constitution of Kenya 2010, Article 159.

### 2.3 Language and Cultural Sensitivity

All training materials and sessions shall be conducted in a language and manner that is culturally sensitive and easily understandable by the diverse workforce.

### 2.4 Record Keeping

The Contractor shall maintain detailed records of all training sessions, including participant lists and training materials used. These records shall be made available to KETRACO upon request and may be subject to audit.

The Contractor shall maintain accurate records of wages, working hours, and employment contracts, and make them available for inspection by relevant authorities.

## **2.5 Continuous Improvement**

The Contractor shall actively seek feedback from trained personnel to continuously improve the effectiveness of the training programs.

Periodic refresher courses may be required to ensure ongoing awareness and compliance through mainstream training or daily safety talks.

## **2.6 Training Communication and reporting**

The Contractor shall communicate the training schedule to all relevant personnel and provide regular reports to the Project Manager on the progress and effectiveness of the training programs.

## **2.7 ESHS Reporting**

As part of the Progress Report specified in CESMP, the Contractor submits an ESHS activity report summarizing all ESHS initiatives implemented in relation to the execution of the Works during the reporting period to the Project Manager monthly.

- a) The activity report is a separate document from the update of the Construction - ESMP, which is updated at the intervals indicated in of the ESHS Specifications.
- b) The ESHS activity report is written exclusively in official language of communication which is English.
- c) CESHS activity report is submitted at the latest 7 working days after the last day of the month in question. The report contains the following information:
  - ESHS personnel present at the Site at the end of the month.
  - Construction works activities conducted during the month.
  - Inspections carried out (location and intervals).
  - Non-conformities detected during the month with descriptions of the root cause analysis and corrective actions /Work Requirements taken.
- d) Description of actions conducted, and measures taken during the month to remedy non-conformities and to manage environmental, social, health and safety risks and impacts.
- e) Description of stakeholder engagement activities undertaken with neighbouring populations, local authorities, governmental agencies.
- f) Monitoring results for the following indicators:
  - Effluent quality of the ESHS Specifications), if applicable.
  - Drinking-water quality, if applicable.
  - Hazardous and non-hazardous waste generation.
  - Air and noise emissions, if applicable.
  - Project Area state
  - Recruitment, number of positions and hours worked by local Contractor's.
  - Health & safety statistics: number of fatal accidents, lost-time accidents, number of accidents without lost-time, serious illness, frequency of accidents, and serious misconduct by Contractor's Personnel including root cause analysis and corrective actions taken.
- g) Gender mainstreaming issues and activities carried out including any incidences of GBV/SEA/SH.

## **2.8 Notification of high risk ESHS incidents.**

The Project Manager and World Bank are informed within one hour of any accident, provide sufficient detail regarding the scope, severity, and possible causes of the incident or accident, indicating immediate measures taken or that are planned to be taken to address it, and any information provided by any contractor and/or supervising firm, as appropriate, including:

- Accidents that result in death, serious or multiple injury to a member of personnel, a visitor or any other third party, caused by the execution of the Works or the behaviour of the personnel of the Contractor,
- Any significant damage to private property,
- Any significant damage to the environment
- Cases of sexual exploitation and abuse (SEA) and sexual harassment (SH)

## **2.9 Site Inspection and Reporting System**

Prepare and submit to the World Bank regular monitoring reports on the environmental, social, health and safety (ESHS) performance of the Project, including but not limited to the implementation of the ESCP (Environmental and Social Commitment Plan), status of preparation and implementation of E&S instruments required under the ESCP, stakeholder engagement activities, and functioning of the grievance mechanism.

### **2.9.1 Weekly Inspections**

In addition to daily internal inspections, the Contractor shall undertake weekly site inspections. The EHS Officer will conduct these inspections to ensure proper implementation of measures, address problematic conditions, and anticipate and mitigate significant negative impacts.

### **2.9.2 Quarterly Audits**

The Contractor shall conduct quarterly audits, evaluating the Contractor's on-site practices and procedures. The audit will be based on the Plans, Monthly Reports, and previous site inspection outcomes, providing an assessment of the Contractor's ongoing performance.

### **2.9.3 Monthly Monitoring Reports**

The contractors and supervising firms to provide monthly monitoring reports in accordance with the metrics specified in the respective bidding documents and contracts, and submit such reports to the World Bank through KETRACO. The report should include a schedule of statutory permits, licenses, incident/accident if any and any other requirements as agreed by the World Bank such as (1) Monthly Environmental, Social, Health and Safety Monitoring Report and one (1) Monthly Health based on CESMP, CESMoP, and H&S Plan. The Monthly Report should cover executive summaries, construction activities, monitoring results, interpretations, graphical representations, the status of mitigation measures, corrective and preventive actions, action on recommendations, a summary of complaints, investigation results, and future key issues.

### **2.9.4 Final Project Completion Report:**

Within 4 weeks after completing construction works, the Contractor shall submit Final Monitoring Reports: one (1) Final Environmental and Social Monitoring Report and one (1) Final Health and Safety Monitoring Report. These reports will include construction activity descriptions, overall monitoring results, graphical representations, and lessons learned.

### **3 PROTECTION OF THE ENVIRONMENT**

Environmental Management is at key in all KETRACO projects, and this section outlines the Mandatory steps for the mitigation/enhancement, monitoring, consultative and institutional strengthening measures to prevent, minimize, mitigate, or compensate for adverse environmental impacts and to enhance beneficial impacts. A CESMP shall specify how, when and by whom these measures shall be implemented.

#### **3.1 Vegetation Clearance**

- The Contractor describes in the CESMP the planned methods and schedule for vegetation clearing. Specific agreement from the Project Manager is obtained prior to any clearing works.
- Vegetation clearing using chemicals is not permitted.
- Vegetation clearing using bulldozer is not permitted in zones less than 30 m from areas designated as sensitive by KETRACO, where only manual clearing is authorized.
- Unless otherwise specified in the Contract or if otherwise instructed by the Project Manager, burning vegetation is not permitted.
- Areas cleared prior to undertaking earthworks are shown on a plan with a minimum scale of 1/10,000. Plans are submitted to the Project Manager for validation prior to starting clearing works.
- The Contractor undertakes physical demarcation of zones to be cleared using a method approved by the Project Manager. Trees not to be cut down are identified in relation with the Project Manager. Such trees are marked with paint and protected against clearing machinery using a method approved by the Project Manager.

#### **3.2 Emissions and Pollution Limits**

Incorporate resource efficiency and pollution prevention and management measures in the ESIAs/ ESMPs for the followings:

##### **3.2.1 Air Emissions**

The Contractor shall guarantee that emissions of pollutants into the air from construction activities adhere to the limits stipulated by local environmental regulations. Specific limits for pollutants, including but not limited to particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and volatile organic compounds (VOCs), shall be clearly defined. The Contractor is responsible for implementing measures and utilizing technologies that ensure compliance with these defined limits. Regular monitoring and reporting of emissions shall be conducted throughout the project to verify adherence to environmental regulations. This commitment underscores the importance of maintaining air quality standards and minimizing the environmental impact of construction activities. Violation of these limits may result in penalties, legal consequences, or other corrective actions as stipulated by local regulations.

##### **3.2.2 Water and Effluent Discharges**

The Contractor shall be obligated to ensure that surface discharges and effluents from the project site strictly adhere to permissible limits for water quality in accordance with the Water Act of 2016 and Water Quality Regulations of 2006. Specific parameters including biochemical oxygen demand (BOD), chemical oxygen demand (COD), suspended solids, and other identified pollutants shall be outlined, each with corresponding limits as defined by the regulations. The Contractor is responsible for implementing measures and employing technologies that guarantee compliance with these specified water quality standards. Regular monitoring and



reporting of water discharges shall be conducted throughout the project to confirm adherence to environmental regulations. Any deviations from the stipulated limits shall prompt immediate corrective actions to mitigate environmental impact and ensure compliance with regulatory requirements. Violation of water quality standards may result in penalties, legal consequences, or other corrective measures as defined by law.

### **3.3 Soil Contamination**

The Contractor shall be required to implement effective measures to prevent soil contamination throughout the construction activities. In line with environmental regulations, specific limits for soil pollutants, including heavy metals or hydrocarbons, shall be established. The Contractor is responsible for employing best practices and utilizing technologies to ensure compliance with these defined limits. Regular monitoring and assessment of soil quality shall be conducted during and after construction to verify adherence to environmental standards. In the event of any identified contamination, prompt corrective actions shall be taken to mitigate the impact and restore the soil quality. This commitment emphasizes the importance of preventing soil contamination and maintaining environmental integrity in accordance with regulatory requirements.

### **3.4 Noise and vibration levels**

The Contractor shall be required to adhere to permissible noise levels as defined by local regulations, with specific limits for both daytime and nighttime operations. Additionally, the Contractor shall explicitly address measures for mitigating noise pollution, including those related to excessive vibrations resulting from activities such as blasting. These requirements shall be detailed in the Contractor's ESMP (Environmental and Social Management and Monitoring Plan), providing a comprehensive framework for managing noise, vibration, and blasting impacts.

The CESMP shall incorporate measures for blasting activities, outlining techniques to minimize vibrations and noise generation. The Contractor shall strictly adhere to the provisions outlined in the Noise and Excessive Vibrations Regulations of 2006. This includes employing best practices, utilizing appropriate technologies, and implementing precautionary measures to prevent adverse effects on the environment and surrounding communities.

### **3.5 Solid Waste Management**

- The Contractor shall apply the 3R principle. Waste management should be based on the following hierarchy: prevention of waste generation, reuse, recycling, and disposal in ensuring sustainable waste management as stipulated in the Sustainable waste management act 2022.
- Appropriate disposal methods shall be clearly specified. The Contractor is responsible for implementing effective waste management practices, including segregation, recycling, and proper disposal, to minimize environmental impact and adhere to regulatory standards. The details of these waste management measures shall be outlined in the CESMP. Regular monitoring and reporting will be conducted to verify compliance with waste management regulations throughout the project duration. Violations may result in penalties, legal consequences, or other corrective measures as defined by local environmental authorities.
- The Contractor shall establish and maintain a waste register which is at the disposal of the Project Manager. This register will record all waste management operations.
- The waste register is established and available as of the Contractors mobilization to any Project Area. This register will be archived for at least 1 year after the Taking-Over Certificate for the Works is issued.

- The Contractor implements specific waste management practices adapted to the level of danger for human health or the natural environment.
- Waste is categorised and stored separately prior to removal from the Project Areas, depending on the level of danger, phase (liquid, solid or gas), the waste management solution to be applied and its potential in terms of recycling or reuse.
- Waste is collected from each Project Area at the same rate that it is produced and is placed in temporary locations meeting the following criteria: a) Located at a distance of over 100 m from any natural sensitive area and over 500 m from any socioeconomic sensitive area (school, market, healthcare centre, water well or catchment area), with the exception of waste storage area in camps; b) Protected from moving machinery and vehicles, but easy to access for regular collection; c) Located on a flat impervious surface to prevent infiltrations; d) Under cover for non-inert waste; e) Stored in containers of the appropriate size, tightness and level of resistance depending on the danger and phase (solid, liquid, gas) of the waste; f) Liquid wastes storage is equipped with secondary retention with a volume at least
- The use of third-party waste management services is subject to a documented prior audit of the treatment, storage and recycling facilities by the Contractor, to guarantee conformity with the provisions of the ESHS Specifications on waste.
- The Contractor Must use NEMA licenced waste transporters and dispose waste sustainably in approved sites as per the Sustainable waste management Act 2022.
- Contractor regarding waste management also apply to any third-party waste management Subcontractor. The ESS Manager reserves its right to inspect third party waste management facilities and prohibit the Contractor from using the facilities if considered unacceptable.

### **3.6 Hazardous Waste Management**

The Contractor shall commit to minimizing the use of hazardous chemicals throughout the project, ensuring their handling adheres to established safety and environmental guidelines. Specific limits on the usage of identified hazardous chemicals shall be clearly detailed, and comprehensive measures for spill prevention and response shall be outlined. The Contractor shall implement best practices for the storage, transportation, and disposal of hazardous materials, prioritizing safety, environmental protection, and compliance with relevant regulations. The details of these measures will be incorporated into the CESMP. Regular monitoring and reporting will be conducted to verify compliance with hazardous material usage limits and spill prevention protocols throughout the project duration.

### **3.7 Protection of adjacent environment**

- The Contractor unless instructed otherwise by the Project Manager, the Contractor uses construction methods and means of protection to avoid or minimize adverse effects that are incurred on vegetation, soils, groundwater and surface water, biodiversity, natural drainage, and the water quality in areas within any Project Area and its surroundings for the entire duration of the Works.
- Wetland areas include marshes, fens, mires or natural or artificial bodies of water, whether permanent or temporary, where water is stagnant or flowing, fresh, saline, or briny, including seawater with a low-tide depth of six metres or less. Filling of all or part of a wetland area is not permitted unless the Works are necessary according to the provisions of the Contract or the instructions of the Project Manager.

### **3.8 Borrow pits & Access Roads**

The Contractor will submit to the Project Manager for prior approval, within the framework of the ESMP:

- The location of proposed borrow areas or areas to be excavated.
- Excavation /blasting permits obtained from regulatory bodies.
- proposed backfill material stockpile locations or zones designated for the rubble from demolition works.
- The access routes to the Project Areas will be shown on a map and approved.
- Rehabilitation plan

### **3.9 Ecological Impact & Biodiversity protection**

The Contractor shall comply with limits on ecological impact, considering factors such as habitat disruption, deforestation, and disturbance to wildlife. These limits shall be informed by baseline information as documented in the ESIA report. The Contractor shall incorporate ESIA recommendations, as outlined in the ESIA report, into the CESMP. This incorporation will ensure that the mitigation measures recommended in the ESIA report are seamlessly integrated into the project's management and monitoring framework. The ESIA report, serving as a reference document, will provide baseline information on the existing ecological conditions and comprehensively identify potential impacts that may arise from the project. The Contractor is obligated to adhere to the specified limits and implement the outlined mitigation measures, incorporating ESIA recommendations, to minimize adverse effects on the environment.

- The Contractor shall ensure that all personnel are informed and aware of the importance to protect fauna and flora. Information and awareness training is documented.
- The Contractor shall ensure that all personnel are informed of and aware of wildlife encounters procedures. Information and awareness training is documented.
- The Contractor shall define in the CESMP the method with regards to fauna and flora management prior to clearing activities. This method must notably address the work schedule, which sometimes can be adjusted to limit impacts on fauna and flora.
- Where possible, areas shall be cleared from one side to another, to prevent animals becoming trapped.
- The Contractor personnel shall not approach, injure, hunt, capture, possess, feed, transport, rear or trade wild animals and/or collect eggs while working on the Project Areas.
- The Contractor personnel shall not collect flora species while working on the Project Areas.
- The Contractor shall report any sighting or finding of wounded or dead wildlife to the Project Manager immediately.
- The Contractor shall protect excavations to prevent injury to animals.
- The Contractor shall release any trapped uninjured animals immediately. The Contractor shall not disturb natural habitats outside the Project Areas.
- The Contractor shall only use designated roads or paths and abide by speed limits.
- The Contractor shall not start any bonfires that might forest fires.
- The Contractor shall not introduce Invasive Alien Species (IAS).
- All construction machinery imported from overseas shall be inspected to detect IAS and washed before dispatching to the Project Areas. If the presence of topsoil contaminated with IAS is detected, that topsoil shall only be stored or re-spread in the area from where it was removed.
- When earthworks are carried out in IAS contaminated areas, vehicles shall be washed before moving them to other areas.

- Where necessary, the Contractor shall develop IAS control procedures (e.g. physical removal, slashing, mulching, herbicides, etc.).
- Methods used to control or prevent species shall not cause adverse impacts on the environment or communities.

### **3.10 Water Resources Management**

- The Contractor shall at all costs avoid conflicting with the water demands of local communities.
- Abstraction of both surface and underground water shall only be done with the consultation of the local community and after obtaining a permit from the WRA.
- Abstraction of water from wetlands shall be avoided. Where necessary, permission must be obtained from relevant authorities.
- No construction water containing spoils or site effluent, especially cement and oil, shall be allowed to flow into natural water drainage courses.
- Wash water from washing out of equipment shall not be discharged into water courses without pre-treated.
- Site spoils and temporary stockpiles shall be located away from the drainage system, and surface runoff shall be directed away from stockpiles to prevent erosion.

## **4 CLIMATE CHANGE AND EXTREME WEATHER EVENTS CONSIDERATIONS**

The Contractor shall undertake construction activities that adhere to climate-resilient principles. This includes considering the current and projected impacts of climate change, incorporating adaptive design measures, and utilizing resilient materials and technologies. The infrastructure shall be designed and constructed to withstand extreme weather events, temperature variations, and other climate-related risks. The contractor shall adopt and comply with internationally recognized climate resilience standards.

### **4.1 Public Exposure to Operational Accidents**

#### **4.1.1 Operational Risk Mitigation**

The design of the electricity transmission infrastructure shall incorporate robust safeguards to mitigate risks associated with public exposure to operational accidents or natural hazards. This includes the implementation of safety features, warning systems, and protective barriers to minimize the potential impact on the public.

#### **4.1.2 Safety Measures, Emergency Response**

Adequate safety measures, emergency response plans, and protective structures must be seamlessly integrated into implementation of electricity transmission infrastructure projects. The Contractor is responsible for ensuring that the design includes comprehensive safety features, emergency response protocols, and protective structures to safeguard both the public and project personnel. Furthermore, community engagement shall be an integral part of the safety strategy. The Contractor shall actively involve the local community, providing them with information on safety measures, conducting drills, and seeking their input on emergency response plans. This collaborative approach ensures that the community is well-prepared and informed, contributing to an overall safer environment.

#### **4.1.3 Rates of Wages and Conditions of Labour**

##### **Compliance with Kenyan Labour Laws**

The Contractor shall comply with all applicable labour laws and regulations in Kenya, including but not limited to the Employment Act, 2007 and any subsequent amendments.

##### **Minimum Wage**

The Contractor shall pay all project personnel, including subcontractors, at least the minimum wage as stipulated by Kenyan labour laws.

Regular reviews shall be conducted to ensure continued compliance with any changes in minimum wage requirements.

##### **Working Hours**

Working hours shall adhere to the provisions of the Employment Act, 2007 and the EIA license conditions ensuring that project personnel do not exceed the maximum working hours stipulated by law.

## **5 CONTRACTOR'S HEALTH AND SAFETY REQUIREMENTS**

### **5.1 Formulation of Health and Safety Policy**

The Contractor commits to formulating a robust Health and Safety Policy statement that aligns with local regulations and international best practices. This policy shall outline the Contractor's commitment to ensuring the well-being of all personnel involved in the project. The policy statement will be prominently displayed at the project site and communicated to all employees, subcontractors, and relevant stakeholders.

### **5.2 Formation of Health and Safety Committee**

The Contractor shall establish a dedicated Health and Safety Committee comprised of qualified and experienced individuals. This committee will be responsible for regularly reviewing and updating the Health and Safety Policy, conducting accident investigations, conducting risk assessments, recommending corrective actions, and promoting a culture of safety within the project. The committee's composition shall include representatives from different levels of the workforce to ensure diverse perspectives and comprehensive hazard identification.

### **5.3 Allocated Budget for Health and Safety**

The Contractor commits to allocating a dedicated budget specifically earmarked for health and safety initiatives. This budget will cover the procurement of necessary safety equipment, training programs, and the implementation of safety measures outlined in the Health and Safety Policy. The allocated funds shall be regularly reviewed to ensure adequacy in addressing evolving health and safety needs.

### **5.4 Establishment of a Functional Health and Safety Office**

The Contractor shall establish and maintain a functional Health and Safety Office equipped with qualified safety officers commensurate with the nature and scale of the project. The safety officers shall possess both academic credentials and a professional background in EHS.

## **6 ROAD SAFETY**

### **6.1 Traffic Management Plan**

The Contractor shall develop and implement a comprehensive Traffic Management Plan that outlines the safe flow of construction-related traffic, including ingress and egress points, signage, and designated pedestrian pathways. This plan shall be regularly updated as construction activities progress.

### **6.2 Speed Limits and Signage**

Speed limits within the construction zone shall be clearly defined and visibly communicated through appropriate signage. The Contractor shall ensure that all vehicles, including construction equipment, adhere to these speed limits to maintain a safe working environment.

### **6.3 Pedestrian Safety**

Dedicated pedestrian walkways, separated from vehicular traffic, shall be established where required. Adequate signage and protective barriers shall be employed to guide pedestrians safely through or around the construction zone.

## **6.4 Vehicle Safety Measures**

All construction vehicles and equipment shall be regularly inspected and maintained to meet roadworthy standards. High-visibility markings and lighting shall be utilized to enhance visibility, especially during low-light conditions.

## **6.5 Driver Training**

The Contractor shall provide comprehensive road safety training to all construction vehicle operators. This training shall cover safe driving practices, awareness of construction zone conditions, and emergency response procedures.

## **6.6 Emergency Response Protocols**

The Contractor shall establish clear emergency response protocols for road accidents within the construction zone. This includes immediate reporting, medical assistance, and coordination with local emergency services.

## **6.7 Regular Audits and Reviews**

Regular audits and reviews of the road safety measures shall be conducted to assess their effectiveness. Any necessary adjustments or improvements identified during these audits shall be promptly implemented.

# **7 INFECTIOUS DISEASE MANAGEMENT**

The Contractor shall commit to implementing specific measures to prevent the spread of communicable diseases. This includes but is not limited to:

- Disinfection of work areas, facilities, and equipment when necessary and as per guidelines as may be provided from time to time by the Ministry of Health to minimize the risk of infectious diseases.
- Provision and mandatory use of appropriate personal protective equipment (PPE) for all workers to prevent the transmission of infectious agents.
- Implementation of social distancing protocols and the redesign of workspaces to minimize close contact, ensuring a safe working environment in the face of infectious diseases.

The Contractor shall develop and implement a comprehensive infectious disease response plan as part of the CESMP. In the event of a confirmed case within the workforce, the Contractor commits to prompt and transparent reporting to the Ministry of Health efficiently and responsibly.

## **7.1 Training and Awareness Programs**

The Contractor shall conduct regular training and awareness programs to educate the workforce on preventive measures, symptoms, and the importance of early reporting of any illness. Emphasis will be placed on maintaining a vigilant and informed workforce to minimize the risk of infectious disease transmission.

## **7.2 Flexibility and Remote Work Options**

In response to potential outbreaks of communicable diseases, the Contractor commits to providing flexible work arrangements, including remote work options where feasible. This ensures continuity of project activities while prioritizing the health and safety of the workforce.

### **7.3 Medical Support and Telehealth Services**

The Contractor shall ensure access to medical support for workers, including telehealth services where appropriate. This includes providing information on local healthcare facilities, access to medical consultations, and facilitating testing and vaccination programs as recommended by health authorities.

### **7.4 Regular medical Reviews and Adaptation Protocols**

The Contractor shall commit to continuously reviewing and adapting health and safety protocols in response to emerging information about infectious diseases. This includes staying informed about guidelines from health authorities and adjusting practices accordingly to enhance the effectiveness of preventive measures.

### **7.5 Emergency Response and Coordination**

The Contractor shall establish and maintain an emergency response team specifically tasked with managing potential outbreaks of communicable diseases. This team will be responsible for coordinating with relevant health authorities, implementing emergency measures, and ensuring the welfare of the workforce.



## **8 NON-DISCRIMINATION, SEXUAL EXPLOITATION AND ABUSE, GENDER BASED VIOLENCE, AND SEXUAL HARASSMENT**

The Contractor shall commit to providing equal opportunities for all workers, regardless of gender, ethnicity, religion, or any other characteristic protected by the Employment Act of 2007 and the Sexual Offences Act of 2006. The contractor shall also encourage women to apply for jobs. Discrimination, harassment, or any form of unfair treatment based on these characteristics is strictly prohibited. Furthermore, the Contractor recognizes the importance of fostering a work environment free from sexual exploitation and abuse, gender-based violence, and sexual harassment. All workers shall be treated with dignity and respect, and any form of exploitation, abuse, violence, or harassment will not be tolerated. The Contractor shall implement comprehensive prevention, reporting, and response mechanisms to address instances of sexual exploitation, abuse, gender-based violence, and sexual harassment. This includes providing confidential reporting channels, awareness training, and immediate, impartial investigations into reported incidents. Violations of this commitment will result in appropriate disciplinary action, up to and including termination of the contract. By upholding these principles, the Contractor aims to create a safe, inclusive, and respectful workplace for all workers.

## **9 CONTRACTOR KEY SOCIAL SAFEGUARDS REQUIREMENTS**

### **9.1 SECURITY MANAGEMENT**

Assess and implement measures to manage the security risks of the Project, including the risks of engaging security personnel to safeguard project workers, sites, assets, and activities in the ESMP, and in a manner satisfactory to World Bank, and guided by the principles of proportionality and GIIP, and by applicable law, in relation to hiring, rules of conduct, training, equipping, and monitoring of such personnel.

### **9.2 Employment Contracts**

The Contractor shall furnish written employment contracts to project personnel employed for a tenure period more than 3 months, explicitly delineating terms, and conditions of employment. These contracts shall comprehensively outline job roles, working hours, remuneration, and any other pertinent employment terms. This commitment is aimed at ensuring transparency, clarity, and adherence to legal and regulatory requirements in employment relationships. The written contracts will serve as a binding agreement, providing both the Contractor and project personnel with a clear understanding of their respective rights and obligations throughout the duration of the project.

### **9.3 Social Security, Insurance and Benefits**

The Contractor shall commit to ensuring full compliance with social security requirements, encompassing contributions to the National Social Security Fund (NSSF), the National Health Insurance Fund (NHIF), and the Work Injury Benefits Act (WIBA). Additionally, in accordance with labour laws or prevailing industry standards, the Contractor will undertake to provide any supplementary benefits, ensuring that project personnel receive comprehensive and legally mandated coverage. This commitment extends to maintaining up-to-date contributions to social security funds and adhering to the stipulated provisions to safeguard the well-being and welfare of all employees involved in the project.

### **9.4 Child Labour and Forced Labour**

The Contractor shall commit to refraining from employing workers below the legal working age (below 18 years) and shall not engage in any form of forced or compulsory labour. Adequate measures, including age verification protocols, will be implemented to ensure that all workers voluntarily participate in the workforce and are above the legal working age. This commitment aligns with the Employment Act 2007 and international labour standards, emphasizing the Contractor's dedication to upholding ethical and lawful employment practices

throughout the project duration. Violation of this clause will result in immediate corrective action to reinforce a workforce free from child labour and forced labour.

## **9.5 Employee Grievance Redress Mechanism**

A transparent and accessible grievance redress mechanism shall be established to address any concerns,.

Establish, publicize, maintain, and operate an accessible grievance mechanism, to receive and facilitate resolution of concerns, queries, issues, complaints, or sense of injustices raised by project personnel and grievances in relation to the Project, promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all Project-affected parties including VMGs, at no cost and without retribution, including concerns and grievances filed anonymously.

The grievance mechanism shall be equipped to receive, register, and facilitate the resolution of SEA/SH complaints, including through the referral of survivors to relevant gender-based violence service providers, all in a safe, confidential, and survivor-centred manner.

The Contractor shall investigate and resolve grievances promptly and fairly. If not solved at this level, the complaint can be escalated within the confines of the law.

## **10 FACILITIES FOR CONTACTOR STAFF AND LABOUR**

### **10.1 Accommodation and Living Conditions**

The Contractor shall facilitate the provision of adequate and suitable accommodation for project personnel, giving due consideration to applicable national law. The provided living conditions must adhere to health and safety standards, ensuring safety, hygiene, and compliance with applicable regulations. This commitment underscores the Contractor's responsibility to maintain a living environment that prioritizes the well-being and welfare of project personnel throughout the project.

### **10.2 Healthcare Services**

The contractor shall ensure access to basic healthcare for all project personnel and shall establish a system for addressing medical emergencies, including first aid services, and ensuring timely access to medical facilities.

### **10.3 Mothers room**

Where applicable, the Contractor shall consider providing a lactation room for breastfeeding.

### **10.4 Cultural & Gender Sensitivity**

The contractor shall ensure that facilities and services are designed and implemented with cultural sensitivity, considering the diverse backgrounds of project personnel. Cultural and religious practices shall be respected and accommodated. The contractor shall also ensure that sanitary facilities are available for both male & female staff.

### **10.5 Transport Facilities**

Transportation services, especially for personnel assigned to remote or challenging-to-access locations, shall be facilitated. These transport services must adhere to stringent safety standards while offering reasonable comfort for the workforce. This commitment emphasizes the Contractor's dedication to fostering effective communication and facilitating safe transportation for all project personnel throughout the project's duration.

### **10.6 Safety Measures**

Adequate security measures shall be in place to ensure the safety of project personnel, including provisions for well-lit areas, and emergency response plans.

### **10.7 Accessibility for Persons with Disabilities**

Facilities, services and appropriate PPEs shall be designed to be accessible to persons with disabilities, ensuring equal opportunities for all project personnel.

### **10.8 Environmental Considerations**

The contractor shall cause the undertaking of Environmental and Social Impact Assessments for accommodation facilities.

Facilities shall be designed and managed with a focus on minimizing environmental impact and promoting sustainability.

## **10.9 Security Plan**

Contractors must commit to developing and implementing a comprehensive security plan for the project site. The submitted security plan should address all relevant aspects of security, encompassing personnel, equipment, and infrastructure. The Contractor shall submit the security plan to KETRACO for thorough review and approval before the commencement of any construction activities. Compliance with this bidding condition is imperative to ensure the safety and security of the project site, personnel, and assets. This condition underscores the project's commitment to maintaining a secure environment and mitigating potential risks during the project's execution.

The security plan will include aspects such as site perimeter wall and access control for substations and workers camps, site access control for transmission lines, employment of security personnel, lighting, surveillance systems, collaboration with the national police, community policing and emergency response, conflict resolution mechanisms, among others.

## **10.10 VULNERABLE AND MARGINALIZED GROUPS PLANNING FRAMEWORK (VMGPF)**

NO VMGF will be required for the project since all civil works subprojects to be implemented by the Contractor, (Kimuka substation and associated lines), will be on sites that are owned by the sector agencies. As such, subprojects' implementation will have no impacts on VMG lands, livelihoods, or culture.

## **10.11 VULNERABLE AND MARGINALIZED GROUPS PLAN (VMGP)**

Each implementing agency to implement their respective subprojects in line with ESS7. In this regard, ensure compliance with:

- The provisions of the SEP in relation to meaningful consultation with VMGs in a culturally appropriate and gender and intergenerationally inclusive manner ways
- The provisions of the LMP in ensuring that VMGs are considered for unskilled and semi-skilled employment opportunities

## **11 CULTURAL HERITAGE AND ISS REQUIREMENTS**

### **11.1 Cultural Heritage integration in CESMP**

The Contractor shall commit to incorporate the cultural heritage findings from the ESIA seamlessly into the CESMP. This entails utilizing the baseline information provided by the ESIA to guide decision-making during construction, implementing measures to mitigate potential impacts on cultural heritage, and engaging with local communities and experts for collaborative input. The Contractor shall ensure compliance with local regulations, WB ESS 8 and ESIA recommendations, with periodic reviews to verify ongoing adherence.

### **11.2 Engagement with Local Communities**

The Contractor shall commit to conducting meaningful engagement with local communities and relevant stakeholders wherever possible to gather comprehensive information on cultural heritage sites and practices. These engagements will be documented systematically in the Cultural Heritage Management Plan (CHMP). The CHMP will serve as a repository of insights gathered through consultations, ensuring that local perspectives and knowledge regarding cultural heritage are considered in the planning and execution of construction activities. Mitigation strategies, such as site preservation, relocation, or archaeological excavations, shall be outlined in the Cultural Heritage Management Plan.

### **11.3 Chance Find Procedures**

In the event of any unexpected discovery of cultural heritage artifacts or features during construction activities, the Contractor shall immediately report the same to the project environmental and social experts through the Project Manager. An assessment will be conducted to determine the nature and significance of the discovery. If the find is deemed to be of cultural or historical importance, work in the immediate area shall remain suspended until appropriate mitigation measures are established. The discovery and subsequent actions taken, including any alterations to construction plans, shall be documented in the Cultural Heritage Management Plan (CHMP). This proactive approach ensures that chance finds are handled responsibly, minimizing potential impacts on cultural heritage resources and enabling adherence to legal and ethical obligations.

## 12 SITE RESTORATION & REHABILITATION

Prepare, consult upon, adopt, publicly disclose and implement a simple RAP to guide KETRACO in the acquisition of 400/220 kV Kimuka Substation and associated Transmission Lines for purposes of registering easement. Establish and operate an accessible grievance mechanism - as part of the RAP - to address any resettlement related complaints.

- a) Unless instructed otherwise by the Project Manager, the Contractor will rehabilitate all Project Areas disturbed by the Works, before the provisional acceptance of the Works.
- b) All buildings and free-standing and underground structures (e.g. piping, underground tanks, sumps, and basins) are removed under the site demobilization plan.
- c) All waste and rubble are removed by the provisions of the ESHS Specifications. After removal of buildings structures and rubble, the Contractor returns Project Areas to their original condition, according to the following provisions.
- d) Land is adjusted to ensure that run-off water drains without eroding soil or stagnating in pools. Unless instructed otherwise by the Project Manager, the gradients of restored sites must be as for the adjacent undisturbed land.
- e) Rehabilitated Project Areas do not represent hazards for people. Areas near steep drops at quarries are indicated with permanent concrete signs. Holes are refilled. Sharp or unstable items are rendered inoffensive.
- f) Unless specified otherwise in the Contract, or instructed otherwise by the Project Manager, the Contractor undertakes revegetation of all Project Areas disturbed by the Works and bears the cost of such work.
- g) Topsoil set aside during initial earthworks as per ESHS Specifications, is evenly spread over cleared areas. The surface of compacted soils on Project Areas is loosened by scouring (using rakes or other acceptable methods).
- h) The Contractor describes in the CESMP the planned revegetation works to ensure sustainable Project Area rehabilitation: methods, plant species to be used and their origins, activity schedule based on a progressive taking over of Project Areas.
- i) Prior approval by the Project Manager is required regarding the origin of seeds and plants proposed by the Contractor. The species used for revegetation must be suitable for the local environmental conditions and selected according to the rehabilitation program: stabilization of backfill, landscaping, drainage, prevention of erosion, etc.
- j) Revegetation is undertaken throughout the duration of construction Works and is not limited to the rehabilitation of Project Areas at completion of the Works.

## **13 STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE**

### **13.1 STAKEHOLDER ENGAGEMENT PLANS PREPARATION AND IMPLEMENTATION**

Adopt and implement the Stakeholder Engagement Plan (SEP) for the Project, which shall include measures to, inter alia, provide stakeholders with timely, relevant, understandable, and accessible information, and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination, and intimidation. Adopt and implement the provisions of the SEP where applicable.

### **13.2 PROJECT GRIEVANCE MECHANISM**

Establish, publicize, maintain, and operate an accessible grievance mechanism, to receive and facilitate resolution of concerns and grievances in relation to the Project, promptly and effectively, in a transparent manner that is culturally appropriate and readily accessible to all Project-affected parties including VMGs, at no cost and without retribution, including concerns and grievances filed anonymously.

The grievance mechanism shall be equipped to receive, register, and facilitate the resolution of SEA/SH complaints, including through the referral of survivors to relevant gender-based violence service providers, all in a safe, confidential, and survivor-centred manner.

### **13.3 INFORMATION DISCLOSURE**

Disclose the Project information summary on environmental and social risks and impacts and proposed mitigation measures to allow stakeholders to understand the risks and impacts of the Project, proposed mitigation measures, and potential opportunities. At a minimum, disclose the following:

- An easy-to-understand Non-Technical Summary (NTS), summarizing the purpose, nature, and scale of the Project, the duration of the proposed Project activities, and potential risks and impacts of the Project activities on local communities, and the proposals for mitigating these.
- The proposed stakeholder engagement process
- The process and means by which grievances can be raised and will be addressed.

Disclose information in relevant local languages and in manner that is accessible and culturally appropriate, considering any specific needs of groups that may be differentially or disproportionately affected by the Project or groups of the population with specific needs (such as, disability, literacy, gender, mobility, differences in language and accessibility). Due to personal data protection, all personal information of individuals (such as name, address, telephone numbers, etc.) must be removed or blackened in the disclosed information, unless their disclosure is required under national regulation.

## 14 ESMPS FOR THE PROJECT AS DEVELOPED IN THE PROJECT ESIA REPORTS

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
Soil Erosion and stormwater management	- Fitting in the designs to the existing drainage plan for the station	KETRACO-ESS Team and Contractor	Entire period construction
	- Apply soil erosion control measures such as levelling of the project site to reduce run-off velocity and increase infiltration of storm water into the soil.	Contractor	Entire period construction
	- Ensure that construction vehicles are restricted to use existing graded roads	Contractor	Entire period construction
	- Ensure that any compacted areas are ripped to reduce run-off.	Contractor	Entire period construction
Noise and vibration	- Sensitise construction vehicle drivers and machinery operators to switch off engines of vehicles or machinery not being used.	Contractor	Entire period construction
	- Sensitise construction drivers to avoid running of vehicle engines or hooting	Contractor	Entire period construction
	- Regular servicing of engines and machine parts to reduce noise generation	Contractor	Entire period construction
	- Ensure that all generators and heavy-duty equipment are insulated or placed in enclosures (containers) to minimize ambient noise levels.	Contractor	Entire period construction
	- The noisy construction works will entirely be planned to be during daytime when most of the neighbours will be at work.	Contractor	Entire period construction
	- Provide necessary PPE to workers who may be exposed to high levels of noise and ensure proper and constant use	Contractor	Entire period construction
	- All construction equipment and machinery to be used must be tested to verify if they are compliant with Kenya and the internationally acceptable standards of noise.	Contractor	Entire period construction
Management of Excavated Rocks and Soils	- Avoid ripping off the overburden soil from location outside the project's actual footprint.	Contractor	Continuous



Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Use the overburden material to landscape other sections of the complex.	Contractor	One-off
	- Enquire with the community of their needs for the material for use	Contractor	Continuous
<b>Oil spill management</b>	- Install oil trapping equipment in areas where there is a likelihood of oil spillage e.g. during maintenance of vehicles.	Contractor	Continuous
	- In case of an oil spill, immediate clean up measures will be instituted	Contractor	Continuous
	- Storage and liquid impoundment areas for fuels, raw and in the process material solvents, wastes and finished products should be designed with secondary containment to prevent spills and the contamination of soil, ground and surface water	Contractor	One off
	- Collected used oils should be re-used, disposed of appropriately by licenced waste handlers, or be sold for reuse to licensed firms	Contractor	Continuous
<b>Increased Water Demand</b>	- Install water conserving taps that turn-off automatically when water is not being used	Contractor	Entire period construction
	- Promote recycling and reuse of water as much as possible	Contractor	Entire period construction
	- Promptly detect and repair water pipe and tank leaks	Contractor	Entire period construction
	- Sensitise construction workers to conserve water by avoiding unnecessary use.	Contractor	Entire period construction
	- Ensure taps are not running when not in use	Contractor	Entire period construction
<b>Increased Energy Consumption</b>	- Ensure electrical equipment, appliances and lights are switched off when not being used	Contractor	Entire period construction
	- Install energy saving bulbs/tubes at all lighting points instead of incandescent bulbs which consume higher electric energy	Contractor	Entire period construction

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Plan well for transportation of materials to ensure that fossil fuels (diesel, transformer oil, petrol) are not consumed in excessive amounts	Contractor	Entire period construction
	- Monitor energy use during construction and set targets for reduction of energy use.	Contractor	Entire period construction
<b>Increase in raw material demand</b>	- Ensure accurate budgeting and estimation of actual construction material requirements to ensure that the least amount of material necessary is ordered.	Contractor	Entire period construction
	- Ensure that damage or loss of materials at the construction site is kept to a minimum through proper storage and use.	Contractor	Entire period construction
	- Encourage material recycling	Contractor	Entire period construction
<b>Dust emission</b>	- Ensure strict enforcement of on-site speed limit regulations	Contractor	Entire period construction
	- Avoid excavation works in extremely dry weather	Contractor	Entire period construction
	- Sprinkle water on graded access routes when necessary to reduce dust generation by construction and vehicles	Contractor	Entire period construction
	- Stockpiles of earth should be enclosed / covered / watered during dry or windy conditions to reduce dust emissions	Contractor	Entire period construction
	- PPE to be provided to employees and ensure proper and constant use	Contractor	Entire period construction
<b>Exhaust emission</b>	- Sensitize truck drivers and machine operators to switch off engines when not in use	Contractor	Entire period construction
	- Regular servicing of engines and machine parts to reduce exhaust emission generation	Contractor	Entire period construction
	- Alternative non-fuel construction equipment shall be used where feasible	Contractor	Entire period construction
<b>Increased solid waste generation</b>	- Use of an integrated solid waste management system, i.e. the 3 R's: 1. Reduction at source 2. Reuse 3. Recycle	Contractor	Entire period construction

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Accurate estimation of the dimensions and quantities of materials required.	Contractor	Entire construction period
	- Use of durable, long-lasting materials that will not need to be replaced as often, thereby reducing the amount of construction waste generated over time	Contractor	Entire construction period
	- ESHS Provide facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage	Contractor	Entire construction period
	- Use building materials that have minimal or no packaging to avoid the generation of excessive packaging waste	Contractor	Entire construction period
	- Reuse packaging materials such as cartons, cement bags, empty metal and plastic containers to reduce waste at site	Contractor	Entire construction period
	- Waste collection bins to be provided at designated points on site	Contractor	Entire construction period
	- Dispose waste more responsibly by contracting a registered waste handler who will dispose the waste at designated sites or landfills only and in accordance with the existing laws.	Contractor	Entire construction period
<b>Faucal waste management and general hygiene</b>	- Provide means for handling sewage generated at the construction site	Contractor	One-off
	- Make your own arrangements for the provision of sanitary facilities commensurate to the number of staff at site.	Contractor	One -off
	- The facilities should be gender differentiated, well-marked, accessible, and supplied with sufficient and clean water for flushing and washing hands.	Contractor	
	- Due to the sensitivity of the site, food vendors will not be granted access to site. Therefore, to enhance public health, it would be prudent to undertake surveillance of food vending at Kimuka to ensure that site workers remain healthy and vigorous.	Contractor	Continuous

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
<b>Minimizing excessive noise and vibration</b>	- Install portable barriers to shield compressors and other small stationary equipment where necessary.	Contractor	When necessary
	- Use quiet equipment (i.e. equipment designed with noise control elements).	Contractor	Continuous
	- Limit pickup trucks and other small equipment to a minimum idling time and observe a common-sense approach to vehicle use and encourage workers to shut off vehicle engines whenever possible.	Contractor	Continuous
	- Construction works should be done during the day when people are away and also the outside environment is also noisy.	Contractor	Continuous
	- Adhere to the Environmental Management and Coordination (Noise and Excessive Vibration Pollution (Control) Regulations, 2009) regarding noise limits at the workplace.	Contractor	Continuous
	- Application of modern methods of construction that avoid excessive vibrations.	Contractor	Continuous
<b>Live electrical equipment</b>	- Train and certify workers to install, maintain, or repair electrical equipment.	Contractor	Continuous
	- Deactivating and properly grounding live power distribution lines before work is performed on, or in proximity, to the lines;	Contractor	Continuous
	- Ensuring that live-wire work is conducted by trained workers with strict adherence to specific safety and insulation standards. Qualified or trained employees working on transmission or distribution systems should be able to achieve the following- - Distinguish live parts from other parts of the electrical system. - Determine the voltage of live parts. - Understand the minimum approach distances outlined for specific live line voltage. - Ensure proper use of special safety equipment and procedures when working near or on exposed energized parts of an electrical system	Contractor	Continuous
	- Specific training, safety measures, personal safety devices, and other precautions should be defined in a health and safety plan	Contractor	Continuous

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	<ul style="list-style-type: none"> <li>- Workers should not approach an exposed energized or conductive part even if properly trained unless:</li> <li>- The worker is properly insulated from the energized part with gloves or other approved insulation; or,</li> <li>- The energized part is properly insulated from the worker and any other conductive object; or,</li> <li>- The worker is properly isolated and insulated from any other conductive object (live-line work).</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Workers not directly associated with power transmission and distribution activities who are operating around power lines or power substations should adhere to local legislation, standards, and guidelines relating to minimum approach distances for excavations, tools, vehicles, pruning, and other activities.</li> </ul>	Contractor	Continuous
<b>Working at height</b>	<ul style="list-style-type: none"> <li>- Testing structures for integrity prior to undertaking work;</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Implementation of a fall protection program that includes training in climbing techniques and use of fall protection measures; inspection, maintenance, and replacement of fall protection equipment; and rescue of fall-arrested workers, among others;</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Establishment of criteria for use of 100 percent fall protection (typically when working over 2 meters above the working surface, but sometimes extended to 7 meters, depending on the activity). The fall protection system should be appropriate for the tower structure and necessary movements, including ascent, descent, and moving from point to point;</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Installation of fixtures on tower components to facilitate the use of fall protection systems;</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Provision of an adequate work-positioning device system for workers. Connectors on positioning systems should be compatible with the tower components to which they are attached;</li> </ul>	Contractor	Continuous
	<ul style="list-style-type: none"> <li>- Hoisting equipment should be properly rated and maintained and hoist operators properly trained;</li> </ul>	Contractor	Continuous

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Safety belts should be of not less than 16 millimetres (mm) (5/8 inch) two-in-one nylon or material of equivalent strength. Rope safety belts should be replaced before signs of aging or fraying of fibres become evident;	Contractor	Continuous
	- When operating power tools at height, workers should use a second (backup) safety strap;	Contractor	Continuous
	- Signs and other obstructions should be removed from poles or structures prior to undertaking work;	Contractor	Continuous
	- An approved tool bag should be used for raising or lowering tools or materials to workers on structures;	Contractor	Continuous
	- No drunk worker should be allowed on site to reduce risk falling from height and ensuring proper communication on site	Contractor	Continuous
<b>Minimizing exposure to EMFs</b>	- Identification of potential exposure levels in the workplace and the use of personal monitors during working activities. - Training of workers in the identification of occupational EMF levels and hazards. - Establishment and identification of safety zones to differentiate between work areas with expected elevated EMF levels compared to those acceptable for public exposure, limiting access to properly trained workers.	Contractor	Continuous
	- Implementation of action plans to address potential or confirmed exposure levels that exceed reference occupational exposure levels	Contractor	Continuous
<b>Risk of occupational accidents and diseases/physical hazards</b>	- Set up a health and safety committee and periodic site inspections, training and annual safety audits;	Contractor	Continuous
	- Provide appropriate PPEs to workers and visitors to the proposed route;	Contractor	Continuous
	- Adhere to the provisions of the occupational Health and Safety Act of 2007;	Contractor	Continuous
	- Have a qualified first aider on site or medic	Contractor	Continuous
<b>Incidents, accidents and dangerous occurrences</b>	- Ensure that provisions for reporting incidents, accidents and dangerous occurrences during construction and operation is as per	Contractor	Continuous

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	prescribed forms obtainable from the local Occupational Safety and Health Office are in place.		
<b>Ergonomics, Repetitive Motion, Manual Handling</b>	- Use of mechanical assists to eliminate or reduce exertions required to lift materials, hold tools and work objects, and requiring multi-person lifts if weights exceed thresholds ·	Contractor	Continuous
	- Selecting and designing tools that reduce force requirements and holding times, and improve postures	Contractor	Continuous
	- Providing user adjustable workstations·	Contractor	Continuous
	- Incorporating rest and stretch breaks into work processes, and conducting job rotation	Contractor	Continuous
	- Implementing quality control and maintenance programs that reduce unnecessary forces and exertion	Contractor	Continuous
	- Taking into consideration additional special conditions such as left-handed persons	Contractor	Continuous
Reduction on impact at extraction sites and efficient use of raw material	<ul style="list-style-type: none"> <li>- Source building materials such as sand, ballast and hardcore from the registered quarry and sand mining firms</li> <li>- Order for what will be required through accurate budgeting and estimation of actual construction requirements.</li> </ul>	Contractor	
	- Consider reuse of building materials and use of recycled building materials	Contractor	Continuous
<b>Forced labour and child labour</b>	- No employment for anyone under the age of 18	Contractor	Continuous
	- All persons seeking employment (contractor, subcontractor) should be required to provide a national identity card.	Contractor	Continuous
	- The client and contractor should not employ forced labour, which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty.	Contractor	Continuous
	- Implement a labour management plan	Contractor	Continuous

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Adopt and implement a Grievances Redress Mechanism to receive and address grievances from host community	Contractor	Continuous
	- Implement the stakeholder's engagement plan (SEP) to ensure effective communication with host community on raising awareness to prevent child labour and forced labour,	Contractor	Continuous
<b>Fire safety</b>	- Conduct a fire risk assessment	Contractor	Quarterly
	- Ensure compliance with fire safety regulations and install all necessary fire safety equipment	Contractor	Continuous
	- Conduct regular trainings and fire drills for employees	Contractor	Continuous
	- Periodic maintenance to ensure that, there are; - no overloaded electrical systems; no incorrectly installed wiring; no live naked wires; and fuel store areas are continuously monitored	Contractor	Continuous
	- Build capacity for the community on fire related issues including fighting and vigilance	Contractor	Continuous
<b>Increase in social vices including HIV/AIDS</b>	IEC and Sensitization forums for employees and community members on ethics, morals; general good behaviour and the need for the project to co-exist with the neighbours	Contractor	Continuous
	- Counselling and testing on HIV/AIDS and other STDs to employees and Community members	Contractor	Continuous
	- Provision of condoms	Contractor	Continuous
<b>Sexual Exploitation and Abuse (SEA) and Workplace Sexual Harassment (SH) and other forms of Gender-Based Violence (GBV)</b>	<ul style="list-style-type: none"> <li>- Ensure sensitization of the contractor, their sub-contractors, and consultants on GBV -SEA/SH issues including refraining from unacceptable conduct towards local community members.</li> <li>- Introduce a worker Code of Conduct as part of the employment contract, to be signed by all with physical presence on site as well as within the project area, and to include sanctions for non-compliance (e.g., termination).</li> <li>- Translate the Code of Conduct to appropriate languages</li> <li>- Develop a training plan for all project personnel on the Code of conduct and implement it</li> <li>- Ensure mandatory trainings regarding GBV -SEA/SH to be provided to all project workers including temporary and casual</li> </ul>	Contractor	One off prior to construction



Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	<p>workers.</p> <ul style="list-style-type: none"> <li>- Develop and implement a community awareness plan targeting various community' groups</li> <li>- Undertake awareness meetings for the project affected communities on GBV-SEA/SH issues. Participants should be informed about the Code of Conduct, related national legislations and available GRM including available services/referral mechanism mechanisms for seeking help.</li> <li>- Develop and implement a SEA/SH sensitive GRM including survivor-centered SOPs to receive, manage and respond to SEA/SH complaints and other</li> <li>- emerging complaints including risks such as COVID 19</li> <li>- Implement the GBV-SEA/SH Management Plan and Labour Influx Management Plan</li> <li>- Ensure separate sanitation and hygiene facilities (toilets, utility rooms and changing rooms) for men and women in the workers' camps / workplaces are provided.</li> <li>- Ensure that changing rooms and/or toilets are located in separate and well-lit areas, and can be locked from the inside.</li> <li>- Adopt a policy to cooperate with law enforcement agencies in investigating complaints about GBV-SEA/SH should a survivor choose the legal redress. Survivors should be facilitated to understand that this may require them to commit to cooperate with the agencies.</li> <li>- Inform workers and local community about national laws such as the Sexual Offences Act. No 3 of 2006 that make GBV-SEA/SH a punishable offence which is prosecuted.</li> <li>- Visibly install signs in appropriate language(s) around the project site (if applicable) indicating to workers and the local population that acts of Sexual Exploitation and Abuse/Harassment (EAS/HS) are prohibited on this site.</li> <li>- Apply all Kenyan Constitutional / legal requirements on gender and sexual based violence throughout the project.</li> </ul>		

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
<b>Climate Change Mitigation</b>	<ul style="list-style-type: none"> <li>- The contractor shall undertake a tree planting exercise at location(s) to be identified in consultation with KETRACO, the community and relevant authorities. The contractor shall plant trees worth KES 5,000,000 or at least 30,000 trees whichever is less. The cost shall be deemed to cover the entire exercise which shall involve the following: <ul style="list-style-type: none"> <li>o Selection of trees species with highest survival rate and can grow with baseline environmental conditions at the selected planting locations.</li> <li>o Transportation of the seedlings to the selected planting locations.</li> <li>o Preparation of the land including but not limited to clearing the site of invasive species and preparing the hole.</li> <li>o Planting the seedlings at the onset of rainy seasons.</li> </ul> </li> <li>- 5. Protection and care of the planted tree for a period of 12 months</li> </ul>	Contractor	One -off
<b>Introduction and spread of invasive alien species.</b>	<ul style="list-style-type: none"> <li>- Inspecting and cleaning vehicles, equipment, that may carry invasive species before entering or leaving an area i.e. material sources, construction sites etc.</li> <li>- Educating the public and stakeholders about the risks and impacts of invasive species and how to prevent or report them.</li> <li>- Monitoring and detecting invasive species early and reporting them to the relevant authorities such as Kenya Plant Health Inspectorate Services (KEPHIS), National Environment Management Authority (NEMA), the Kenya Wildlife Service (KWS), the Kenya Forestry Service (KFS), and the International Centre of Insect Physiology and Ecology (ICIPE),</li> <li>- Implementing rapid response and eradication programs for newly detected or localized invasive species.</li> <li>- Applying biological, chemical, mechanical, or cultural methods to control or reduce the population of established invasive species.</li> </ul>	Contractor	Continuous
<b>Mitigating Cultural Impacts</b>	<ul style="list-style-type: none"> <li>- Avoid constructing substations or tower spotting by transmission line design changes / changing tower spans to avoid spotting the pylons in areas of archaeological or cultural heritage importance if such sites be found.</li> </ul>	Contractor	Entire construction period
	<ul style="list-style-type: none"> <li>- Work together with local elders to identify and map any other physical cultural resource and other areas of cultural heritage importance, not identified during the ESIA process.</li> </ul>	Contractor	Entire construction period

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	- Use existing utility and transport corridors for transmission and distribution, and existing roads and tracks for access roads, whenever possible.	Contractor	Entire period construction
	- Work in close liaison with national agencies that deal with areas of archaeological and cultural importance such as the National Museums of Kenya (NMK) to offer guidance in chance finds procedure if unknown heritage resources, particularly archaeological resources, are encountered during project construction or operation.	Contractor	Entire period construction
	- Implement the stakeholder's engagement plan (SEP) to ensure effective communication in relation to cultural resources with the host community.	Contractor	Entire period construction
<b>CAPACITY SUPPORT</b>	- Sensitize/train the PIU staff of both implementing agencies on: a) Stakeholder Engagement Plan (SEP) – stakeholder mapping and engagement b) Emergency preparedness and response c) Community health and safety d) Labour Management Procedures (LMP) consisting of Code of Conduct for project workers in relevant languages and Labour Specific GRM e) World Bank ESHS requirements f) SEA/SH prevention and response measures g) Project wide GRM h) Occupational Health and Safety (OHS) i) ES requirements of this ESCP j) Subproject screening and monitoring/supervision k) Climate Assessment of Energy Projects l) Gender Mainstreaming and assessment in energy projects	Contractor	Entire period construction
	- Train project workers on: a) Occupational health and safety including on emergency prevention and preparedness and response arrangements to emergency situations, Personal protective equipment, Workplace	Contractor	Entire period construction

Potential Negative Impacts	Recommended Mitigation Measures	Responsible Party	Time Frame
	<p>risk management, prevention of work-related accidents, Health and safety rules; waste management, Occupational health and safety standards, etc.</p> <p>b) Employment and working conditions – Conditions of employment under national labour laws; Code of conduct for suppliers, service providers and subcontractors; Workers' organizations and trade unions; and Rules on child labour and minimum age for employment of children.</p> <p>c) SEA/SH sensitive GRM – Registration and Processing Procedures; Complaint Resolution Procedures; Operation of the GRM; Documentation and processing of complaints; and Use of the procedure by the different actors.</p> <p>d) GBV/SEA/SH – Awareness, prevention and measures to prevent, mitigate and respond to SEA/SH risks; Content of the project's code of conduct prohibiting behaviours related to SEA/SH, as well as sanctions in case of non-compliance; Themes, activities and target audiences will be defined as part of the prevention measures; Support to survivors, including service providers identified by the project in the intervention areas and the referral and counter-referral process; and SEA/SH complaint management: complaint handling, responsible parties, verification process and complaint resolution</p>		
	<p>- Undertake community training on emergency prevention and preparedness and response arrangements to emergency situations</p>	Contractor	Entire construction period

**Table 2 : Construction Phase ESMP for Rabai STATCOM**

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>Loss of vegetation cover / biodiversity</b>	<ul style="list-style-type: none"> <li>Provide adequate protection against scours and erosion; and consider the onset of the rainy season with respect to construction schedules.</li> <li>Ensure replanting of indigenous plant/tree species in applicable areas to offset any vegetation/tree loss.</li> <li>Ensure proper demarcation and delineation of the project area to be affected by construction works.</li> <li>Specify locations for trailers and equipment, and areas of the site which should be kept free of traffic, equipment, and storage.</li> <li>Designate access routes and parking within the site.</li> <li>As part of climate mitigation measures, KETRACO in collaboration with KFS, local Community Forest Associations within Rabai subcounty and Kilifi County government, will implement a tree planting program within identified sections in Kilifi County of 30,000 seedlings.</li> </ul>	Contractor	Continuous
<b>Soil erosion risk / Soil degradation</b>	<ul style="list-style-type: none"> <li>Soils excavated for the construction of foundations should not be left exposed to wind or water for long periods.</li> <li>The contractor should avoid steep terrain during the transportation of construction material by using alternative routes, using light vehicles, or existing routes where appropriate.</li> <li>Ensure timely revegetation of disturbed areas with local species common in the area to complement natural vegetation and to improve ground cover.</li> <li>A storm water management measures that encourage infiltration by use of recharge areas, detention and/or retention with graduated outlet control structures.</li> <li>Apply soil erosion control measures such as vegetation of steep embankments created in the project site to reduce run-off velocity and increase infiltration of storm water into the soil.</li> </ul>	Contractor	Continuous

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<ul style="list-style-type: none"> <li>▪ Ensure that construction vehicles are restricted to use existing graded roads.</li> <li>▪ Ensure construction activities are kept outside the tree and vegetation protection zone, for any trees and vegetation that will be maintained on project work sites.</li> </ul>		
<b>Dust Emissions</b>	<ul style="list-style-type: none"> <li>• Covering heaps and berms of soil.</li> <li>▪ Avoid excavation works in extremely dry weather.</li> <li>▪ Ensure strict enforcement of on-site speed limit regulations.</li> <li>▪ Sprinkle water on graded access routes when necessary to reduce dust generation by construction and vehicles.</li> <li>▪ Ensure stockpiles of earth are enclosed / covered / watered during dry or windy conditions to reduce dust emissions.</li> <li>▪ Provide appropriate PPE to employees and ensure proper and constant use.</li> <li>▪ Adhere to the Environmental Management and Co-ordination (Air Quality) Regulations, 2014.</li> </ul>	Contractor	Daily inspection
<b>Exhaust Emissions</b>	<ul style="list-style-type: none"> <li>▪ Discourage plant operators and drivers of construction vehicles from unnecessary revving and idling.</li> <li>▪ Limit construction traffic movement and operations to the most necessary activities through adequate site planning.</li> <li>▪ Sensitise truck drivers and machine operators to switch off engines when not in use.</li> <li>▪ Regular servicing of engines and machine parts to reduce exhaust emission generation.</li> <li>▪ Alternative non-fuel construction equipment shall be used where feasible.</li> <li>▪ Adhere to the Environmental Management and Co-ordination (Air Quality) Regulations, 2014.</li> </ul>	Contractor	Daily inspection
<b>Increased generation and movement of storm water and impact on drainage</b>	<ul style="list-style-type: none"> <li>▪ Use of storm water management practices that slow peak runoff flow, reduce sediment load, and increase infiltration.</li> <li>▪ Regular inspection and maintenance of permanent erosion and runoff control features.</li> </ul>	Contractor	Throughout
<b>Increased generation of solid</b>	<ul style="list-style-type: none"> <li>▪ Use of an integrated solid waste management system i.e. the 3 R's: 1. Reduction at source 2. Reuse 3. Recycle.</li> </ul>	Contractor	Continuous

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>waste</b>	<ul style="list-style-type: none"> <li>▪ Accurate estimation of the dimensions and quantities of materials required.</li> <li>▪ Use of durable, long-lasting materials that will not need to be replaced as often, thereby reducing the amount of construction waste generated over time.</li> <li>▪ Provide facilities for proper handling and storage of construction materials to reduce the amount of waste caused by damage.</li> <li>▪ Use building materials that have minimal or no packaging to avoid the generation of excessive packaging waste.</li> <li>▪ Waste collection bins to be provided at designated points on all active sites.</li> <li>▪ Dispose waste more responsibly by contracting a NEMA registered waste handler who will dispose of the waste at designated sites or landfills only and in accordance with the existing laws.</li> <li>▪ Comply with the provisions of the Environmental Management and Co-ordination, Waste Management Regulations 2006.</li> </ul>		
<b>Increased discharge of Wastewater / Sewage</b>	<ul style="list-style-type: none"> <li>▪ Provide means for handling sewage generated at the construction site.</li> <li>▪ Water containing pollutants such as cements, concrete, lime, chemicals, and fuels shall be discharged into a conservancy tank for removal from site. This particularly applies to water emanating from concrete batching plants and construction vehicles wash area.</li> <li>▪ Conduct regular checks for sewage pipe blockages or damages since these can lead to release of the effluent into the land and water bodies.</li> <li>▪ Installation of sediment traps and use of runoff drainage to control flow and velocity.</li> <li>▪ Provision of mobile toilets at every active construction site</li> <li>▪ Monitor effluent quality on quarterly basis to ensure that the stipulated discharge standard as per Environmental Management and Co-ordination (Water quality) Regulations 2006 are not violated.</li> </ul>	Contractor	Continuous
<b>Noise and excessive vibration</b>	<ul style="list-style-type: none"> <li>▪ Sensitize drivers of construction vehicles and machinery operators to switch off engines or machinery that are not being used.</li> <li>▪ Ensure that all vehicles and construction machinery are kept in good condition all the time to avoid excessive noise generation.</li> <li>▪ Ensure that all workers wear earmuffs and other personal protective gear/equipment when working in noisy sections.</li> <li>▪ Undertake loud noise and vibration level activities during off-peak hours during the day (i.e. preferably between 12.00 noon and 2.00 pm).</li> </ul>	Contractor	Throughout

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<ul style="list-style-type: none"> <li>Comply with conditions provided by the Environment Management and Coordination, Noise and Excessive Vibrations Pollution Control Regulations 2009.</li> </ul>		
<b>Increased energy Consumption</b>	<ul style="list-style-type: none"> <li>Promote the use of solar energy and energy efficient bulbs in work site.</li> <li>Switch off lights when not in use in work sites.</li> <li>Installation of pertinent signage at sites and offices on efficient energy consumption.</li> <li>Install electricity meters to monitor the consumption of electricity in work site.</li> <li>Ensure construction machinery and trucks are well maintained.</li> <li>Use energy-efficient construction machinery and trucks during the construction phase of the project.</li> <li>Ensure compliance with Energy Management Regulations of 2012</li> </ul>	Contractor	Throughout
<b>Increased Water Demand / abstraction</b>	<ul style="list-style-type: none"> <li>Harness rainwater (install gutters on the roof of the staff houses to harvest rainwater) and storm water whenever possible for use in dust prevention, gardening, and other site-specific use.</li> <li>Install water efficient dual flush toilet cisterns and water conserving taps that turn off automatically when water is not being used.</li> <li>Promote recycling and reuse of water as much as possible at the workers' campsites.</li> <li>Sensitize construction workers to conserve water by avoiding unnecessary waste.</li> <li>Ensure all taps and cisterns are optimally working.</li> <li>The Contractor must adhere to water quality regulations described in Legal Notice No. 120 of the Kenya Gazette Supplement No. 68 of September 2006 and Water Act 2016.</li> </ul>	Contractor	Throughout



Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>Increased risk of introduction and spread of invasive alien species</b>	<p>This will be mitigated as follows:</p> <ul style="list-style-type: none"> <li>Inspecting and cleaning vehicles, equipment, that may carry invasive species before entering or leaving an area i.e. material sources, construction sites etc.</li> <li>Educating the public and stakeholders about the risks and impacts of invasive species and how to prevent or report them.</li> <li>Monitoring and detecting invasive species early and reporting them to the relevant authorities such as Kenya Plant Health Inspectorate Services (KEPHIS), National Environment Management Authority (NEMA), the Kenya Wildlife Service (KWS), the Kenya Forestry Service (KFS), and the International Centre of Insect Physiology and Ecology (ICIPE),</li> <li>Implementing rapid response and eradication programs for newly detected or localized invasive species.</li> <li>Applying biological, chemical, mechanical, or cultural methods to control or reduce the population of established invasive species.</li> </ul>	Contractor	Throughout
<b>Risk of occupational incidents, accidents and dangerous occurrences and diseases/Electrical hazards</b>	<ul style="list-style-type: none"> <li>Set up a health and safety committee and periodic site inspections, training, and annual safety audits.</li> <li>Prepare comprehensive risk assessments for the specific jobs at the project site.</li> <li>Conduct daily toolbox tasks prior to commencement of work. The topics will be specific to the day's task. Records will be maintained including attendances to facilitate monitoring.</li> <li>Provide appropriate PPEs to workers and visitors to the proposed route.</li> <li>Adhere to the provisions of the occupational Health and Safety Act of 2007.</li> <li>Have a qualified EHS Officer; first aider/ medic on site.</li> <li>Ensure visitor and worker inductions are carried out as the project will be carried out within a live substation.</li> <li>The contractor to ensure daily work permits are obtained from Kenya Power and Lighting Company (KPLC) as the works will be carried out within the live Rabai 220/132 kV substation.</li> </ul>	Contractor	Throughout

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>Incidents, accidents and dangerous occurrences, Ergonomics, Repetitive Motion, Manual Handling</b>	<ul style="list-style-type: none"> <li>▪ Ensure that provisions for reporting incidents, accidents and dangerous occurrences during construction and operation is as per prescribed forms obtainable from the local Occupational Safety and Health Office are in place.</li> <li>▪ Use of mechanical assistance to eliminate or reduce exertions required to lift materials, hold tools, and work objects, and requiring multi-person lifts if weights exceed thresholds, being cognizant of the restrictions placed due to the live wires within the Rabai 220 kV/132 kV SS.</li> <li>▪ Selecting and designing tools that reduce force requirements and holding times, and improve postures.</li> <li>▪ Providing user adjustable workstations.</li> <li>▪ Incorporating rest and stretch breaks into work processes, and conducting job rotation.</li> <li>▪ Implementing quality control and maintenance programs that reduce unnecessary forces and exertions.</li> <li>▪ Taking into consideration additional special conditions such as left-handed persons</li> </ul>	Contractor	Throughout
<b>Minimization risks on Community Health and Safety</b>	<p>On Traffic / Access roads safety</p> <ul style="list-style-type: none"> <li>▪ Adoption of best transport safety practices across all aspects of project operations with the goal of preventing traffic accidents and minimizing injuries suffered by project personnel and the public.</li> <li>▪ Develop a robust transport management plan.</li> <li>▪ Collaboration with local communities and responsible authorities to improve signage, visibility, and overall safety of roads, particularly along stretches located near schools or other locations where children may be present.</li> <li>▪ Using locally sourced materials, whenever possible, to minimize transport distances.</li> <li>▪ Locating workers campsites close to project sites and arranging bus transport to minimize on external traffic.</li> <li>▪ Emphasizing safety aspects among drivers</li> <li>▪ Improving driving skills and requiring licensing of drivers.</li> <li>▪ Adopting limits for trip duration and arranging driver rosters to avoid overtiredness.</li> <li>▪ Avoiding dangerous routes and times of day to reduce the risk of accidents.</li> </ul>	Contractor	Throughout

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>Health impacts exacerbated by hot, humid weather</b>	<p>To mitigate concerns raised, the following will be undertaken:</p> <ul style="list-style-type: none"> <li>The contractor shall always ensure the provision of and easy access to clean wholesome water for project workers at all work sites, camps, and site offices.</li> <li>Workers, through the contractor, shall be advised during daily toolbox talks to wear loose-fitting, breathable clothing that can help stay cool and prevent excessive sweating during hot months.</li> <li>Provision of shaded shelters at appropriate sites to avoid direct exposure to the sun during breaks and rest times.</li> <li>Training of health and safety personnel to identify and provide emergency first aid for heat-induced symptoms, asthma attacks etc. for affected workers.</li> <li>Provide well-ventilated site offices and camp sites.</li> <li>Ensure regular cleaning and dusting of site offices and campsites to prevent accumulation of dust mites and other allergens.</li> </ul>	Contractor	Throughout
<b>Health Impact such as Spread of HIV/AIDS and other Sexually transmitted diseases</b>	<ul style="list-style-type: none"> <li>Develop appropriate training, awareness content and implement awareness sessions for communities and workers on HIV/AIDS and other STDs.</li> <li>Provide HIV/AIDS and STD awareness and education.</li> <li>Ensure an adequate and accessible provision of condoms to workers both male and female.</li> <li>Providing health services (treatment through standard case management in on-site or community health clinic).</li> <li>Promoting collaboration with local authorities to enhance access of workers' families and the community to public health services.</li> <li>Liaise with relevant health agencies both at national and County level (Kilifi County) (Ministry of Health, National AIDS Control Council (NACC)), including NGOS and CBOs (youth, men, and women groups) on awareness creation.</li> </ul>	Contractor	Throughout project cycle

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<ul style="list-style-type: none"> <li>▪ Periodic sensitization forums for workers on ethics, morals, general good behavior and the need for the project to co-exist with the neighbors.</li> <li>▪ Adhere to and implement the HIV and AIDS Prevention and Control Act, 2006 and the Sexual Offences Act, 2006 and its amendment 2012.</li> <li>▪ Contractors to develop a code of conduct and ensure its signed by all workers with physical presence on site as well as within the project area. The code of conduct will address worker and community interactions considering risks of HIV/AIDs and other STDs resulting from population/labour influx in workplaces.</li> <li>▪ Translate the code of Conduct to suitable languages</li> </ul>		
<b>COVID-19 Infections</b>	<p><b>Transmissions/</b></p> <p>The following should be undertaken:</p> <ul style="list-style-type: none"> <li>▪ Develop and communicate to all employees (skilled, semi-skilled and unskilled), a COVID-19 Preparedness management plan that addresses all aspects of COVID-19 readiness including but not limited to Policy, Planning and Organizing project activities vis-à-vis COVID-19.</li> <li>▪ Ensure workers hired are vaccinated against Covid-19</li> <li>▪ Sensitize all workers (skilled, semi-skilled and unskilled) on COVID-19 risk mitigation measures with sufficient information to keep them and local community safe.</li> <li>▪ Establish prevention and mitigation measures against COVID-19 and arrangements for dealing with suspected and confirmed COVID-19 cases. The measures should include but not limited to; <ul style="list-style-type: none"> <li>✓ Infection control plans,</li> <li>✓ Ensuring social distancing of not less 1.5 meters between employees in all directions,</li> <li>✓ Hygiene promotion through suitable hand sanitizing facility or handwashing soap and water</li> <li>✓ Strict and proper use of face masks throughout all working hours and public places.</li> <li>✓ Implement Ministry of Health guidelines for staff safety and health, including daily temperature checks for everyone in the workplace</li> <li>✓ Increase frequency of cleaning commonly touched surfaces / objects</li> </ul> </li> </ul>	Contractor	Throughout project period

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
<b>Illicit behaviour / drug and alcohol abuse</b>	<ul style="list-style-type: none"> <li>Contractor and proponent will be responsible for ‘their respective workers’ conduct on site.</li> <li>Contractors, subcontractors, and all project staff to behave in a culturally appropriate manner.</li> <li>The contractor and proponent to establish a code of conduct and ensure workers conduct at site adheres to set rules and regulations e.g., on drug use and alcohol, interactions with locals.</li> </ul>	Contractor	Throughout the project cycle
<b>Population / labour influx and pressure on social infrastructure</b>	<ul style="list-style-type: none"> <li>Implement the developed Labour Management plan- see <i>Annex 5</i></li> <li>Establish a local recruitment policy to engage local populace for all unskilled labour / casual workers in order to reduce on population influx in search of jobs including creating slots for locals on semi-skilled employment if available. The local recruitment policy should be carefully developed with relevant stakeholders such as the local administration before the commencement of project activities.</li> <li>Encourage community business interaction within project where possible e.g. local procurement where possible, selling of consumable like food etc. to discourage influx.</li> <li>Provision of camps to alleviate pressure on existing community housing infrastructure and basic services viz., food, water, and sanitation. This will minimize the interactions with the locals, consequently reducing competition for resources and the spread of diseases.</li> <li>Provision of worker transport for locals to reduce the impetus for migration towards the project site which creates demand for local housing, pressure on local infrastructure, services, and utilities, and thus pre-empt the development of larger population centers close to the project site.</li> </ul>	Contractor	Throughout the project period

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<ul style="list-style-type: none"> <li>▪ Ensure induction of all immigrant workers to abide by the code of conduct and respect the community cultural norms and values.</li> <li>▪ Contractors to develop a code of conduct and ensure it's signed by all workers with physical presence on site as well as within the project area. The code of conduct will address worker and community interactions considering risks of GBV-SEA and sexual harassment in workplaces, HIV/AIDs and other STDs resulting from population/labour influx.</li> <li>▪ Establish and ensure early uptake of a Grievance Redress mechanism for local community and Workers.</li> <li>▪ Undertake stakeholder engagement / awareness to prepare local communities psychologically. Awareness will include efforts toward instilling attitudes of tolerance, support and understanding of labour immigrants by the local communities. Discuss issues, risks and opportunities linked to immigration; Understand the concerns of local communities; Raise awareness of risk and opportunities; and Identify solutions to issues relating to in-migration.</li> </ul>		
<b>Gender Based Violence- Sexual Exploitation and Harassment (GBV-SEA/SH)</b>	<ul style="list-style-type: none"> <li>▪ Proposed mitigation measures for GBV-SEA/SH using a survivor-centered approach are:</li> <li>▪ Strengthen KETRACO's institutional capacity for GBV-SEA/SH risk mitigation and response. This includes developing and implementing policies, procedures, codes of conduct, reporting mechanisms, and accountability systems to prevent and address GBV-SEA/SH in project activities and operations.</li> <li>▪ Provide GBV-SEA/SH capacity building for project implementing partners. This includes training and sensitizing project staff, contractors, and other stakeholders on the causes, consequences, and prevention of GBV-SEA/SH, as well as on the survivor-centered approach and the referral pathways for survivors. In turn, the contractor/ subcontractors shall ensure GBV-SEA/SH capacity building and awareness raising for</li> </ul>	Contractor	Throughout

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<p>all workers on the causes, consequences, and prevention of GBV-SEA/SH and their roles and obligations in addressing them. The contractor/subcontractor(s) shall also ensure induction of all workers to abide by the code of conduct and respect the community's cultural norms and values.</p> <ul style="list-style-type: none"> <li>▪ Conduct GBV-SEA/SH risk assessments in project areas. This includes identifying the contextual and project-related factors that may increase the vulnerability of certain groups or individuals to GBV-SEA/SH, such as poverty, displacement, insecurity, social norms, gender inequality, etc.</li> <li>▪ Implement GBV-SEA/SH prevention and mitigation measures in project design and implementation. This includes integrating GBV-SEA/SH considerations into environmental and social assessments, management plans, monitoring and evaluation frameworks, procurement processes, civil works contracts. Specifically, the contractor shall develop and implement a GBV-SEA/SH prevention and response action plan that outlines the specific actions, responsibilities, resources, indicators, and monitoring mechanisms for mitigating GBV-SEA/SH risks during construction.</li> <li>▪ Establish and support grievance mechanisms for GBV) – SEA/SH complaints. This includes setting up accessible, confidential, safe, and responsive channels for reporting and addressing GBV-SEA/SH incidents or concerns related to the project.</li> <li>▪ Facilitate access to quality services for GBV-SEA/SH survivors. This includes ensuring that survivors have timely and appropriate access to health care, psychosocial support, legal aid, protection, and other services that meet their needs and preferences.</li> <li>▪ Engage with communities and stakeholders on GBV-SEA/SH prevention and response. This includes raising awareness, promoting dialogue, fostering participation, building trust, and mobilizing support for addressing GBV-SEA/SH issues in the project context.</li> </ul>		

Potential Impact	Proposed Mitigation Measures	Responsibility for Mitigation	Timeline
	<ul style="list-style-type: none"> <li>Establish and ensure early uptake of a Grievance Redress mechanism for the local community and Workers.</li> </ul>		



## **15 ADDITIONAL CLAUSES.**

In addition to the ESMP in section 15 above, the Contractor will be required to perform or adhere to the following clauses.

1. Prior to starting construction, the contractor must prepare and submit a Contractor Environmental and Social Management Plan (CESMP) to KETRACO for review and acceptance. The CESMP will provide a detailed explanation of how the contractor will comply with the project's safeguard documents such as the ESMP and demonstrate that sufficient funds are budgeted for that purpose. The CESMPs will include specific mitigation measures based on the ESMP, the final design, the proposed work method statements, the nature of the project site, etc. They will also be informed by the work risk assessment and impacts identified by the ESIA study. Primarily the CESMP will include but not limited to:
  - i. Labour Influx Management Plan
  - ii. Workers' Camp & Accommodation Management Plans.
  - iii. Gender Based Violence Management Plan including an Accountability and Response Framework that focus on Sexual Exploitation and Abuse (SEA) and Workplace Sexual Harassment (SH).
  - iv. Stakeholders Engagement Plan.
  - v. Emergency Response Plan.
  - vi. Waste Management Plan.
  - vii. Occupational Health and Safety Management Plan.
  - viii. Air Quality and Dust Management Plan.
  - ix. Water Resources Management Plan.
  - x. Noise and Vibration Management Plan.
  - xi. EHS Code of Conduct.
  - xii. Chance find management plan.
  - xiii. Local Recruitment plan.
  - xiv. Grievances Redress Mechanism.
  - xv. Gender Mainstreaming Plan.
  - xvi. Child Protection Policy.

### **2. Gender based Violence (SEA and SH)**

The contractor must address the risk of Gender Based Violence, through:

- i. Development and implementation of a GBV (SEA/SH) Management Plan, informed by the KETRACO GBV (SEA/SH) Policy.

- ii. Mandatory and repeated training and awareness raising for the workforce about refraining from unacceptable conduct toward local community members, specifically women.
- iii. Informing workers about national laws that make sexual harassment and gender-based violence a punishable offence which is prosecuted.
- iv. Introducing a Worker Code of Conduct as part of the employment contract, and including sanctions for non-compliance (e.g., termination).
- v. Ensuring the GBV (SEA/SH) Management Action Plan take cognizance of (1). Sensitivity of GBV, and (2). The need to ensure confidential reporting and responding to GBV cases reported.
- vi. Commitment to cooperate with law enforcement agencies investigating perpetrators of gender-based violence. However, survivors or guardians of survivors (in the case of minors) can choose to involve the police or not. The project, therefore, can support survivors who choose the legal redress route by referring them to the legal redress referral pathway-which could include legal entities (NGOs, lawyers, police stations, etc.) in the project area working in the GBV space, but the decision to follow this route must be made by the survivor or their guardian. Further, the survivor will be facilitated to understand that they may be required to cooperate with law enforcement.
- vii. Carrying out mandatory and regular training for workers on required lawful conduct in relation to GBV in host community in addition to social and cultural inductions to workers. The project should support survivors who choose the legal redress route by referring them to the legal redress referral pathway – which could include legal entities (NGOs, lawyers, police stations etc.).

### 3. Child and Forced Labour

- i. Develop and implement a Child Protection Policy.
- ii. Ensure that children and minors are not employed directly or indirectly on the project. To ensure minors or children are not employed directly or indirectly in the project, the proponent/contractor will monitor the employment register; in addition to ensuring that workers have national identification cards.

### 4. Labor influx

- i. The project will ensure to utilize as much as possible, local work force to mitigate the impact of project-induced labor influx.
- ii. Where contractors and labour come from outside the local area, contractors will need to maintain labor relation with local communities through labour codes of conduct.

### 5. Roads

- i. In order to carry out the construction works, it may be necessary to close or divert certain specified roads, either permanently or temporarily during the construction period. The contractor should arrange diversions for providing alternative route for transport and/or pedestrians.

- ii. After breaking up, closing or otherwise interfering with any street or footpath to which the public has access, the Contractor shall make such arrangements as may be reasonably necessary so as to cause as little interference with the traffic in that street or footpath during construction of the construction works as shall be reasonably practicable.
- iii. Wherever the construction works interfere with existing public or private roads or other ways over which there is a public or private RoW for any traffic, the Contractor shall construct diversion ways wherever possible.

#### 6. Movement of Trucks and Construction Machinery

- i. The Contractor moving solid or liquid construction materials and waste shall take strict measures to minimize littering of roads by ensuring that vehicles are licensed and loaded in such a manner as to prevent falling off or spilling of construction materials and by sheeting the sides and tops of all vehicles carrying mud, sand, other materials and debris. Construction materials should be brought from registered sources in the area and debris should be transferred to assigned places in the landfill with documented confirmation.

#### 7. Traffic Safety Measures

- i. The Contractor shall provide, erect and maintain such traffic signs, road markings, barriers and traffic control signals and such other measures as may be necessary for ensuring traffic safety around the construction site.
- ii. The Contractor shall not commence any work that affects the public motor roads and highways until all traffic safety measures necessitated by the work are fully operational.

#### 8. Access across the Construction Site and to Frontages

- i. In carrying out the construction works, the Contractor shall take all reasonable precautions to prevent or reduce any disturbance or inconvenience to the owners, tenants, or occupiers of the adjacent properties, and to the public generally. The Contractor shall maintain any existing RoW across the whole or part of the construction site and public and private access to adjoining frontages in a safe condition and to a standard not less than that pertaining at the commencement of the contract. If required, the Contractor shall provide acceptable alternative means of passage or access to the satisfaction of the persons affected

#### 9. Noise and Dust Control

The Contractor shall take all practicable measures to minimize nuisance from noise, vibration, and dust caused by heavy vehicles and construction machinery. This includes:

- i. Respecting normal working hours in or close to residential areas
- ii. Maintaining equipment in a good working order to minimize extraneous noise from mechanical vibration, creaking and squeaking, as well as emissions or fumes from the machinery
- iii. Shutting down equipment when it is not directly in use

- iv. Using operational noise mufflers
- v. Provide a water tanker, and spray water when required to minimize the impact of dust
- vi. Limiting the speed of vehicles used for construction

#### 10. Waste Disposal

The Contractor shall;

- i. Strictly adhere to the Environmental Management and Co-ordination (Waste management) Regulations, 2006.
- ii. Implement sustainable waste management principles of reduction, reuse and recycling.
- iii. Take measures to avoid soil and groundwater contamination by solid and liquid waste.

#### 11. Protection of the Existing Installations

- i. The Contractor shall properly safeguard all buildings, structures, works, services or installations from harm, disturbance, or deterioration during the construction period. The Contractor shall take all necessary measures required for the support and protection of all buildings, structures, pipes, cables, sewers and other apparatus during the concession period, and to repair any damage that occurs in coordination with County Councils and concerned authorities.

#### 12. Protection of Trees and Other Vegetation

- i. The Contractor shall avoid loss of trees and damage to other vegetation wherever possible.
- ii. Adverse effects on green cover within or in the vicinity of the construction site shall be minimized.
- iii. The contractor will restore vegetative cover, where feasible.

#### 13. Physical Cultural Resources

- i. The contractor will train construction crews and supervisors to spot potential archaeological finds. In the event of a potential find, the contractor will inform KETRACO who will in turn liaise with the archaeological department at the National Museums of Kenya, for quick assessment and action.

#### 14. Clearance of Construction Site on Completion

- ii. The Contractor shall clear up all working areas both within and outside the construction site and accesses as work proceeds and when no longer required for the carrying out of the Construction works. All surplus soil and materials, sheds, offices and temporary fencing shall be removed, post holes filled and the surface of the ground restored as near as practicable to its original condition.

#### 15. Worker Health and Safety

To avoid work related accidents and injuries, the contractor will:

- i. Strictly adhere to the Occupational Safety and Health Act (OSHA), No. 15 of 2007.
- ii. Provide occupational health and safety training to all employees involved in works.
- iii. Provide all necessary PPEs including face masks, helmet, overall, safety boots, safety goggles, safety harness, and reflective jackets
- iv. Provide workers in high noise areas with earplugs or earmuffs
- v. Ensure availability of first aid box
- vi. Provide employees with access to toilets and potable drinking water
- vii. Train workers regarding the handling of hazardous materials.
- viii. Store hazardous materials as per the statutory provisions of Occupational Health and Safety Act of 2007.

#### 16. Site Construction, Safety, and Insurance

- i. Further to enforcing the compliance of environmental management and OSHA, the contractor shall be responsible for providing insurance for construction workers, staff attending to the construction site, and citizens as required by Work Injury Benefits Act, 2007.

#### 17. Environmental and Social Monitoring by Contractors

KETRACO will require that, contractors monitor, keep records, and report on the following environmental and social issues: The following list should be used in a manner proportional to the size, risk and impacts of the project.

- i. Safety: hours worked, recordable incidents and corresponding Root Cause Analysis (lost time incidents, medical treatment cases), first aid cases, high potential near misses, and remedial and preventive activities required (for example, revised job safety analysis, new or different equipment, skills training, and so forth).
- ii. Environmental incidents and near misses: environmental incidents and high potential near misses and how they have been addressed, what is outstanding, and lessons learned.
- iii. Major works: those undertaken and completed, progress against project schedule, and key work fronts (work areas).
- iv. E&S requirements: noncompliance incidents with permits and national law (legal noncompliance), project commitments, or other E&S requirements.
- v. E&S inspections and audits: by contractor, engineer, or others, including authorities - to include date, inspector or auditor name, sites visited and records reviewed, major findings, and actions taken.
- vi. Workers: number of workers, indication of origin (expatriate, local, non-local nationals), gender, age with evidence that no child labor is involved, and skill level (unskilled, skilled, supervisory, professional, management).
- vii. Training on E&S issues: including dates, number of trainees, and topics.

- viii. Footprint management: details of any work outside boundaries or major off-site impacts caused by ongoing construction—to include date, location, impacts, and actions taken.
- ix. External stakeholder engagement: highlights, including formal and informal meetings, and information disclosure and dissemination—to include a breakdown of women and men consulted and themes coming from various stakeholder groups, including vulnerable groups (e.g., disabled, elderly, children, etc.).
- x. Details of any security risks: details of risks the contractor may be exposed to while performing its work—the threats may come from third parties external to the project.
- xi. Worker grievances: details including occurrence date, grievance, and date submitted; actions taken and dates; resolution (if any) and date; and follow-up yet to be taken-grievances listed should include those received since the preceding report and those that were unresolved at the time of that report.
- xii. External stakeholder grievances: grievance and date submitted, action(s) taken and date(s), resolution (if any) and date, and follow-up yet to be taken-grievances listed should include those received since the preceding report and those that were unresolved at the time of that report. Grievance data should be gender-disaggregated.
- xiii. Major changes to contractor's environmental and social practices.
- xiv. Deficiency and performance management: actions taken in response to previous notices of deficiency or observations regarding E&S performance and/or plans for actions to be taken - these should continue to be reported until KETRACO determines the issue is resolved satisfactorily.

#### 18. Environmental and Social Liabilities of Contractors

Contractors will be legally and financially accountable for any environmental or social damage or prejudice caused by their staff, and thus are expected to put in place controls and procedures to manage their environmental and social performance. A breakdown for the cost of noncompliance for each mitigation measure will include:

- i. Environmental penalties shall be calculated and deducted in each submitted invoice
- ii. Any impact that is not properly mitigated will be the object of an environmental/social notice by KETRACO
- iii. For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given a notice to remedy the problem and restore the environment. No further actions will be taken if the Project engineer confirms that restoration is done satisfactorily.
- iv. For social notices, the Project engineer will alert the contractor to remedy the social impact and to follow the issue until solved. If the contractor does not comply with the remediation request, work will be stopped and considered under no excused delay.
- v. If the contractor hasn't remedied the environmental impact during the allotted time, the Project engineer will stop the work and give the contractor a notification indicating a financial penalty according to the non-complied mitigation measure.

- vi. No further actions will be required if the Project engineer sees that restoration is done satisfactorily. Otherwise, if Contractor hasn't remedied the situation within one day any additional days of stopping work will be considered no excused delay.
- vii. Environmental notifications issued by the Project engineer might include one or more environmental penalty.
- viii. In the event of repeated noncompliance totaling 5% of the contract value, the Project Engineer will bring the environmental and social notices and the deduction history to KETRACO procurement in order to take a legal action.

#### 19. Grievance Mechanism for Workers

Contractors will put in place a Grievance Mechanism for their workers that is proportionate to their workforce, according to the following principles.

- i. Provision of information. All workers should be informed about the grievance mechanism at the time they are hired, and details about how it operates should be easily available, for example, included in worker documentation or on notice boards.
- ii. Transparency of the process. Workers must know to whom they can turn in the event of a grievance and the support and sources of advice that are available to them. All line and senior managers must be familiar with their organization's grievance procedure.
- iii. Keeping it up to date. The process should be regularly reviewed and kept up to date, for example, by referencing any new statutory guidelines, changes in contracts or representation.
- iv. Confidentiality. The process should ensure that a complaint is dealt with confidentially. While procedures may specify that complaints should first be made to the workers' line manager, there should also be the option of raising a grievance first with an alternative manager, for example, a human resource (personnel) manager.
- v. Non-retribution. Procedures should guarantee that any worker raising a complaint will not be subject to any reprisal.
- vi. Reasonable timescales. Procedures should allow for time to investigate grievances fully, but should aim for swift resolutions. The longer a grievance is allowed to continue, the harder it can be for both sides to get back to normal afterwards. Time limits should be set for each stage of the process, for example, a maximum time between a grievance being raised and the setting up of a meeting to investigate it.
- vii. Right of appeal. A worker should have the right to appeal to KETRACO or national courts if he or she is not happy with the initial finding.
- viii. Right to be accompanied. In any meetings or hearings, the worker should have the right to be accompanied by a colleague, friend or union representative.
- ix. Keeping records. Written records should be kept at all stages. The initial complaint should be in writing if possible, along with the response, notes of any meetings and the findings and the reasons for the findings.

- x. Relationship with collective agreements. Grievance procedures should be consistent with any collective agreements.
- xi. Relationship with regulation. Grievance processes should be compliant with the national employment code.