



REPUBLIC OF KENYA

**MINISTRY OF DEVOLUTION AND ASALs
STATE DEPARTMENT FOR DEVELOPMENT OF THE ASALs**

**Kenya Development Response to Displacement Impact Project
(KDRDIP)**

**ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN FOR THE
CONSTRUCTION OF OVERHEAD WATER TANKS CONNECTED TO 4
BOREHOLES IN LOKARIWON VILLAGE, TURKANA WEST SUB-COUNTY
TURKANA COUNTY**

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1.0 Introduction

This ESMP instrument summarizes the potential impacts of the proposed sub-project, mitigation measures, and responsibility of the various actors, time-frames and estimated cost of remedial actions. This tool will be used to integrate environmental and social management strategies in the entire life cycle of the project.

2.0 General project and site information:

This water sub-project is located at Lokariwon Sub-location, Turkana West Subcounty, Turkana county. It is part of the many sub-projects being implemented under KDRDIP and is expected to benefit **966** Number of households living within the sublocation.

The Sub-project will be implemented and managed by the community through the Community Project Management Committee.

2.1 Name of project site location:

The subproject is located at Lokariwon in Lokichoggio Town.

2.2 Scope of project activity:

The project shall include construction of water tanks connected to four boreholes, excavation of trenches to lay pipes from the boreholes to the tank and distribution lines from the tank to the households.

2.3 Statutory requirements (permits to be obtained before construction activities)

- i) NEMA Approved ESMP -undertaking to be signed by the contractor
- ii) Contractor to be registers with NCA
- iii) Site to be registered with NCA
- iv) Compliance with OSHA Regulations
- v) Compliance with the Local laws

- vi) Compliance with KDRDIP ESMF Requirements
- vii) Compliance with Project World Bank Regulations

3.0 Environmental and Social Management Plan (ESMP)

The objective of the ESMP is to Identify potential Environment, Social Health and Safety impacts that may occur during implementation stage of the project activities, provide implementation and monitoring schedule and ensure compliance with World Bank safeguard policies and Kenyan environmental laws and regulations before and during the implementation of the sub-project.

Table 1 Environmental and Social Management Plan

POTENTIAL IMPACT	MITIGATION MEASURES	RESPONSIBILITIES	TIME FRAME	ESTIMATED COST (KSHS)
<p>Impacts on traffic flow during Excavations a long side the road</p> <p>i) potential increased risks of traffic related accidents</p>	<ul style="list-style-type: none"> ➤ Erect appropriate road signs to warn road users of the Excavation. ➤ Sensitize drivers on safe driving and working practices. ➤ Trenching and laying of pipes should be completed within the planned time-frames to avoid prolonged disruption to businesses 	<p>Contractor</p> <p>CPMC</p>	<p>Throughout construction phase</p>	<p>50,000</p>

<p>Dust and air pollution during excavations</p> <p>i) Dust from the construction activity-trenches</p>	<ul style="list-style-type: none"> ➤ Provide personal protective equipment gear such as dust masks to workers who may be exposed to excess dust ➤ Impose vehicle speed limits to 10 km/h in all areas within the site boundaries. ➤ Avoid open air burning of wastes at the site 	<p>Contractor CPMC</p>	<p>Throughout the construction phase</p>	<p>50,000</p>
<p>Risk of Soil erosion</p> <p>i) Cutting of trees and shrubs</p> <p>ii) Loosening of soils</p>	<ul style="list-style-type: none"> ➤ Vegetation should only be removed from clearly marked areas ➤ Build gabions and soil retaining structures along the trenches so as to ensure the works are covered and protected from storm water, creating diversion etc. ➤ Avoid cutting of trees as much as possible by siting the works away from trees 	<p>Contractor CPMC</p>	<p>Construction phase</p>	<p>20,000</p>

<p>Socio-Economic</p> <p>i) Conflict due to employment of non-locals</p> <p>ii) Exclusion of VMGs</p> <p>iii) Risk of diseases including COVID 19</p>	<ul style="list-style-type: none"> ➤ Give priority to locals when hiring workers for the project or Contracts ➤ Ensure gender balance in employment as far as possible. ➤ Implement HIV/AIDS and STD awareness and prevention programme for workers and local residents targeting risk groups ➤ Ensure Implementation of MOH guidelines on COVID 19 ➤ CPMC and GRM to handle social conflicts related to the project 	<p>Contractor CPMC</p>	<p>Construction phase</p>	<p>20,000</p>
<p>Public Complaints and grievance redress</p> <p>i) Risk of grievances arising from project conception and implementation</p>	<ul style="list-style-type: none"> ➤ Sensitize the community of Grievance redress mechanism ➤ Register all complaints on the project ➤ Record number of complaints resolved ➤ Record the nature of Complaints ➤ Reports all complaints to the Grievances committee 	<p>Contractor, CPMC/ VGRC</p>	<p>Throughout the construction phase</p>	<p>10,000</p>
<p>Sexual Exploitation and Abuse (SEA)</p> <p>i) Risk of SEA by project site</p>	<ul style="list-style-type: none"> ➤ Sensitize the staff of SEA guidelines and protocols ➤ Sensitize community on SEA guideline and protocols 	<p>Contractor, CPMC/ VGRC</p>	<p>Throughout the construction phase</p>	<p>10,000</p>

<p>Contamination of water from leakages</p> <p>ii) Risk of contamination from surrounding contaminating sources</p>	<ul style="list-style-type: none"> ➤ Regular monitoring and inspection of lines to identify leakages and damages to pipes and manholes for repair or maintenance. ➤ Use of high-quality materials that can withstand High temperature to prevent unnecessary leakages. ➤ Clear and unclog blocked lines within the shortest time possible to contain spills ➤ Develop a routine inspection maintenance plan on completion with a budget 	<p>Contractor CPMC</p>	<p>Throughout the operation phase</p>	<p>Included in the works</p>
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<p>Public safety, Occupational Safety and Health hazards</p>	<ul style="list-style-type: none"> ➤ The contractor shall provide ample warning signs and protection around open excavations, stacks of material, etc. And shall be held liable for all claims as a result of neglect of such precautions and provisions. ➤ Ensure workers wear Personal protective Clothing (PPEs) ➤ Restrict and control unauthorized access into sites to prevent accidents and injuries. ➤ Train workers on the use of first aid kit ➤ Ensure that emergency contact numbers of the police and ambulance are available at the sites. ➤ Provide sanitary facilities at construction sites and potable drinking water ➤ Report and record health, safety and environmental incidences/accidents as required by law 	<p>Contractor</p>	<p>Throughout the construction phase</p>	<p>50,000</p>
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4.0 Environmental and Social Monitoring Plan

The CIPIU has set up regular monitoring programme to assess the ambient levels of parameters of the environment and social aspects as stipulated under EMCA, 1999.

The Environmental and Social Monitoring will serve the following functions: -

- i) To ensure that the environmental and social mitigation measures proposed in the ESMP report are effectively implemented by the contractor in compliance to environmental provisions and standard specifications
- ii) To evaluate the effectiveness of environmental and social remedial measures as well as various evaluation techniques and procedures
- iii) To facilitate development of responses to new and developing issues of concern.

There will be continuous monitoring and reporting on the project activities to ensure that the environmental and social management plan (ESMP) is implemented and that its objectives are achieved. The implementing staff and the community Project Management Committee should ensure that the mitigation measures are implemented as outlined in the ESMP.

Table 2. Environmental and Social safeguards Monitoring Plan

sub-Project Phase	Parameter monitored	Where is Parameter monitored	How parameters will be monitored	Frequency	Responsible persons
Activity Preparation	<ul style="list-style-type: none"> ➤ Awareness creation on GRM ➤ Acquisition of permits 	Sub-Project site	<ul style="list-style-type: none"> ➤ Site take over minutes ➤ Statutory permits ➤ Site visits ➤ Site readiness report ➤ Employment of site safety officer ➤ Report on employment of staff segregated in terms of sex and locality ➤ Report on induction of site staff on issues requiring compliance 	Before the start of activities	E&S Safeguards CIPIU, Contractor, CPMC
Dust and air pollution during excavations	<ul style="list-style-type: none"> ➤ Particulates, especially dust as a result of earthworks and excavation 	Sub-project site	<ul style="list-style-type: none"> ➤ Project area 	Every two weeks	E&S Safeguards CIPIU, Contractor, CPMC
Occupational	<ul style="list-style-type: none"> ➤ Frequency of 	Sub-	<ul style="list-style-type: none"> ➤ Project site 	Every two	

Safety and Health hazards	<p>incidents/accidents and fatalities;</p> <ul style="list-style-type: none"> ➤ Number of Trainings conducted ➤ Number of site planning for toilet construction ➤ Health and safety awareness among Workers and Community 	project site		weeks	E&S Safeguards CIPIU, Contractor, CPMC
.Public complaints/grievances	Compliance with KDRDIP GRM guidelines	Sub-Project site	<ul style="list-style-type: none"> ➤ Report on awareness creation on KDRDIP GRM guidelines and charter ➤ Number of complaints registered ➤ Number of complaints solve ➤ Nature of Complaints 	Every two weeks	CF, VGRC, E&S Safeguards officers - CIPIU
SEA	Compliance with KDRIP SEA Guidelines	Sub-project Site	<ul style="list-style-type: none"> • Report on awareness creation on KDRDIP SEA guidelines and protocol 	Monthly	CF, E&S Safeguards officers -CIPIU
Activity Implementation	<ul style="list-style-type: none"> • Compliance with OSHA • Compliance with ESMP 	Sub-Project Site	<ul style="list-style-type: none"> • OSHA Compliance reports • ESMP 	At commencement and	Contractor, CPMC, E&S Safeguards officers CIPIU

			<p>Implementation Compliance Report</p> <ul style="list-style-type: none"> • Compliance Meeting minutes • Orientation reports on safety of staff • Mitigation strategies on risks identifies in ESMP • Monthly reports on occurrences of incidents and accidents • Report on mitigation measures against repeat occurrences 	status report on Every two weeks	
Activity Completion	<ul style="list-style-type: none"> • Compliance with OSHA • Compliance with ESMP 	sub-Project Site	<ul style="list-style-type: none"> • OSHA Compliance completion report • Final ESMP Implementation Compliance Report • Site handover Meeting minutes • Final report on occurrences of incidents and accidents • Issuance of E& Compliance Certificate 	At sub-Project Completions	Contractor, CPMC, E&S Sasfeguards officers CIPIU

5.0 Annex: Project Site photos



*One of the four targeted boreholes in Lokariwon
construction of overhead tanks connected to 4 boreholes
GPS: (E) 465487 (N)649660*

Prepared by: Environmental Safeguard Specialist

Name:
Position
Date
Signature.....

Prepared by: Social Safeguard Specialist;

Name:.....
Position
Date
Signature.....

Reviewed and approved by: NEMA County Director

Name:
Position
Date
Signature.....

Approved/Not approved (Tick appropriately)

Stamped

Contractor Part:

We will adhere to and implement the safeguards as required for this contract.

Name of contractor:

Date:

Signature.....

CPMC Part:

We will ensure that the safeguards developed for this sub-project are adhered to and implemented.

Name of CPMC Chair:

Date:

Signature.....