



**nema**

mazingira yetu | uhai wetu | wajibu wetu

**NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY(NEMA)  
THE ENVIRONMENTAL MANAGEMENT AND CO-ORDINATION ACT  
ENVIRONMENTAL IMPACT ASSESSMENT LICENSE**

License No: **NEMA/EIA/PSL/23827**

Application Reference No: **NEMA/EIA/PSR/32923**

This is to certify that the Environmental Impact Assessment Project Report received from  
**KAMU IRRIGATION SCHEME GROUP Reg: MWA/DSS/SH/909/2015**

**P.O Box 1 - 90103 Mwala, Kenya.**

submitted to the National Environment Management Authority in accordance with the  
Environmental Impact Assessment & Audit Regulations, 2003 regarding the:  
**Proposed Rehabilitation and Expansion of KAMU Irrigation Scheme.**

whose objective is to carry on

**Rehabilitation and Expansion of KAMU Irrigation Scheme comprising weir intake  
works, sedimentation basin, 15km distribution pipeline, infield system to irrigate  
40acres for 395 members plots, road and river/gully crossing works, associated  
facilities and amenities.**

located at

**Kamuthwa and Matulani Sub Locations, Ikaalasa Location, Kibauni Ward, Mwala Sub-  
County, Machakos County.**

has been reviewed and a license is hereby issued for the implementation of the project,  
subject to attached conditions.

Issue date : **02 February, 2023**

Signature

(seal)

**Director-General  
The National Environment  
Management Authority.**

P.T.O.



ISO 9001:2015 Certified

## **1.0 General Conditions**

- 1.1 This project is for the rehabilitation and expansion of Kamu Irrigation Scheme involving weir intake works, sedimentation basin, pipelines, infield system to irrigate 40 acres, water application equipment, road and river/gully crossings, associated works and amenities in Kamuthwa and Matulani Sub-Locations, Kibauni Ward, Mwala Sub-County, Machakos County at an estimated cost of Ksh.70,000.00
- 1.2 The license shall be valid for 24 months (time within which the project shall commence) from the date hereof.
- 1.3 The Director General shall be notified of any transfer, variation or surrender of this license.
- 1.4 Without prejudice to the other conditions of this license, the proponent shall implement and maintain an environmental management system, organizational structure and allocate resources that are sufficient to achieve compliance with the requirements and conditions of this license.
- 1.5 The Authority shall take appropriate action against the proponent in the event of breach of any of the conditions stated herein or any contravention to the Environmental Management and Coordination Act, 1999 and regulations therein.
- 1.6 This license shall not be taken as statutory defence against charges of environmental degradation or pollution in respect of any manner of degradation/pollution not specified herein.
- 1.7 The proponent shall ensure that records on conditions of licenses/approval and project monitoring and evaluation shall be kept on the project site for inspection by NEMA's Environmental Inspectors.
- 1.8 The proponent shall submit an Environmental Audit report in the first year of occupation/operations/commissioning to confirm the efficacy and adequacy of the Environmental Management Plan.
- 1.9 The proponent shall comply with NEMA's improvement orders throughout the project cycle.

## **2.0 Construction Conditions**

- 2.1 The proponent shall obtain the requisite approvals from the County Government of Machakos, Ministry of Water, Sanitation and Irrigation, Water Resource Authority and all other relevant Authorities prior to commencement of works.
- 2.2 The proponent shall, pursuant to Regulation 6(c) of the Water Quality Regulations, 2006 shall protect the riparian by ensuring that **NO** development activity is undertaken within 30M on either sides of Athi River.
- 2.3 The proponent shall apply for authorization from Kenya Forest Service before commencement of the project.
- 2.4 The proponent shall integrate storage dams with capacity for ninety (90) days storage as per the requirements of Department of Water before commencement of the project.
- 2.5 The proponent shall in consultation with the County Government of Machakos and the County Integrated Development and Coordination Committee develop and implement operational framework on continuous stakeholder engagement and grievance redress mechanism to ensure equitable benefit sharing agreements.
- 2.6 The proponent shall obtain requisite approvals/permits from Water Resource Authority and water supply operator and comply with the water abstraction conditions as authorized in the permit issued by Water Resource Authority.
- 2.7 The proponent shall ensure that the weir is built in accordance to the requirements of Rule No.63 (2) of the Water Resource Management Rules, 2007.
- 2.8 The proponent shall obtain authorization from Water Resource Authority to undertake any water works and abstraction permits for all water uses before commencement of the project.



- 2.9 The proponent shall develop and forward to Water Resource Authority ECDP and designs that entail nature, quality and quantity containment, conveyance, treatment and disposal plan of solid and liquid effluents for consideration and approval.
- 2.10 The proponent shall ensure that the ecosystem conservator (KFS) oversees the implementation of the project as a member of the project implementation committee to ensure that only authorized trees are cut.
- 2.11 The proponent shall put up a project signboard as per the Ministry of Transport and Infrastructure standards showing the NEMA EIA license number among other details.
- 2.12 The proponent shall adhere to the Integrated Water Resource Authority Principles through developing and ensuring catchment sustainability throughout the project cycle.
- 2.13 The proponent shall ensure that effective soil erosion prevention and catchment rehabilitation measures are put in place to minimize siltation problems.
- 2.14 The proponent shall ensure that the trenches dug are refilled as fast as practically possible.
- 2.15 The proponent shall ensure that the line routing causes minimum disturbance to human settlements and where this is not achievable, re-settlement and compensation of project affected persons (PAPs) should be done as guided by the Resettlement Action Plan (RAP).
- 2.16 The proponent shall ensure relocation, compensation and restoration of livelihoods for any project affected persons (PAPs) and develop a consultative plan for emerging issues and grievance redress mechanism (GRM) as shall be prescribed in the Resettlement Action Plan (RAP).
- 2.17 The proponent shall create a buffer zone of at least 30 meters in width between the irrigation scheme and the natural water body into which such irrigation scheme discharges its waters as per the Environmental Management and Coordination (Riverbanks, Lakeshores and Seashores) Regulations of 2009.
- 2.18 The proponent shall ensure that all excavated material and debris is collected, re-used and where need be, disposed of as per the Environmental Management and Coordination (Waste Management) Regulations of 2006.
- 2.19 The proponent shall ensure that the cooling systems fitted are suitable alternatives with zero ozone depleting potential as per the Environmental Management and Coordination (Controlled Substances) Regulations of 2007.
- 2.20 The proponent shall ensure strict adherence to the provisions of the Environmental Management and Coordination (Air Quality) Regulations of 2014.
- 2.21 The proponent shall ensure that equity is upheld between upstream, midstream and downstream users as pertains to the provision of water for domestic purposes.
- 2.22 The proponent shall put in place suitable mechanisms to control floods from the river.
- 2.23 The proponent shall ensure that the community is engaged fully in the implementation of the irrigation plan and that full support is rendered before commencement.
- 2.24 The proponent shall ensure strict adherence to the provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
- 2.25 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.
- 2.26 The proponent shall ensure that workers are provided with adequate personal protection equipment (PPE), as well as adequate training.



2.27 The proponent shall ensure that the development adheres to zoning specifications issued for development of such a project within the jurisdiction of the County Government of Machakos and the Water Resource Authority with emphasis on approved land use for the area.

2.28 The proponent shall ensure strict adherence to the Environmental Management Plan developed throughout the project cycle.

### **3.0 Operational Conditions**

3.1 The proponent shall ensure that water resource use conflict resolution mechanisms for both upstream and downstream communities are in place.

3.2 The proponent shall ensure that the requirement by the Ministry of Water for 90 days storage is met by constructing dams with adequate

3.3 The proponent shall ensure that farmers are trained on appropriate methods and management systems of application and disposal of agro-chemicals.

3.4 The proponent shall ensure that farmers are trained on proper soil conservation measures to minimize excessive soil loss.

3.5 The proponent shall be required to cause re-afforestation or afforestation areas of the forest equal to the size of the area cleared for the wayleave.

3.6 The proponent shall ensure that reserve flows are maintained at all distances with self-regulating compensation flow system as provided for in Rule 127 of WRMR, 2007.

3.7 The proponent shall ensure that the project water demands do not interfere with downstream users throughout the project cycle.

3.8 The proponent shall ensure minimal impact of the project to local populations and compensate appropriately for any land and property affected.

3.9 The proponent shall ensure usage of agrochemicals which are approved by Pest Control Products Board and appropriate measures are put in place to prevent surface and underground water pollution.

3.10 The proponent shall ensure that all waste water is disposed as per the standards set out in the Environmental Management and Coordination (Water Quality) Regulations of 2006.

3.11 The proponent shall ensure that the farmers are trained on appropriate use of agro-chemicals to mitigate degradation of water quality.

3.12 The proponent shall ensure that farmers are trained on efficient water use technologies to avoid over flooding.

3.13 The proponent shall ensure that rain water harvesting facilities (90-day flood flow) are provided to supplement surface water during the dry season.

3.14 The proponent shall ensure that all equipment used are well maintained in accordance with the Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations of 2009.

3.15 The proponent shall undertake and share with Water Resource Authority the Annual Audit reports of the project.

3.16 The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations of 2006.



- 3.17 The proponent shall ensure that all workers are well protected and trained as per the Occupational Safety and Health Act (OSHA) of 2007.
- 3.18 The proponent shall in consultation with Kenya Wildlife Service (KWS), County Government of Machakos , Ministry of Interior and Cordination of National Government among other relevant stakeholders, develop and implement human-wildlife conflicts mechanism throught the project cycle.
- 3.19 The proponent shall comply with the relevant principal laws, by-laws and guidelines issued for development of such a project within the jurisdiction of the County Government of Machakos, Ministry of Health, Kenya Wildlife Service, Directorate of Occupational Health and Safety Services, Ministry of Agriculture, Livestock and Fisheries, Ministry of Land, Housing and Urban Development, Ministry of Water and Irrigation, Water Resources Authority, Agriculture and Food Authority, Pest Control Products Board, National Construction Authority and other relevant Authorities.
- 3.20 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as water meters, Water Users Association/Committees, catchment conflict resolution mechanisms, effective soil erosion prevention measures, water quality maintenance plan, prevention of water siltation plan, social and engineering safeguards, waste management plan, water-borne diseases control mechanisms are designed, constructed and employed simultaneously with the proposed project.

#### **4.0 Notification Conditions**

- 4.1 The proponent shall seek written approval from the Authority for any operational changes under this license.
- 4.2 The proponent shall ensure that the Authority is notified of any malfunction of any system within 12 hours on the NEMA hotline No. **0741101100/0736101100** and mitigation measures put in place.
- 4.3 The proponent shall keep records of all pollution incidences and notify the Authority within 24 hours.
- 4.4 The proponent shall notify the Authority in writing of its intent to decommission the facility **three (3) months** in advance.

#### **5.0 Decommissioning Conditions**

- 5.1 The proponent shall ensure that a decommissioning plan is submitted to the Authority for approval at least three (3) months prior to decommissioning.
- 5.2 The proponent shall ensure that all pollutants and polluted material is contained and adequate mitigation measures provided during the phase.

The above conditions will ensure environmentally sustainable development and must be complied with.

A handwritten signature or mark, possibly initials, enclosed in a hand-drawn oval shape.

