



**nema**

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

License No: **NEMA/EIA/PSL/8392**

Application Reference No: **NEMA/EIA/PSR/13563**

This is to certify that the Environmental Impact Assessment Project Report received from  
**Sanergy Limited.**

**P.O Box 25523 - 00100, Nairobi**

submitted to the National Environment Management Authority in accordance with the  
Environmental Impact Assessment & Audit Regulations, 2003 regarding the:

**Proposed Biowaste Processing Facility.**

whose objective is to carry on

**Development of Black Soldier Fly (BSF) biowaste processing facility involving black  
soldier fly rearing unit, loading bay, sawdust storage area, fertilizer plant, briquettes  
store, office, borehole and associated amenities.**

located at

**Plot L.R No. 23961 in Kinanie area Machakos County.**

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

Issue date : **09 August, 2019**

Signature

(seal)

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

P.T.O.



ISO 9001: 2008 Certified

## **General Conditions**

- 1.1 The development is for the proposed development of Black Soldier Fly (BSF) biowaste processing facility involving black soldier fly rearing unit, loading bay, sawdust storage area, fertilizer plant, briquettes store, office, borehole and associated amenities located on plot LR. No.23961 EPZA land in Kinanie Area Machakos County
- 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, Cap 387 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.
- 1.10 The proponent shall provide the final project accounts (final project costs) on completion of construction phase. This should be done prior to project commissioning/ operation/occupation.

## **2.0 Construction Conditions**

- 2.1 The proponent shall obtain authorization to drill the proposed borehole from the Water Resource Authority before drilling and abstracting water.
- 2.2 In the event the project site borders a river or stream, the proponent pursuant to regulation 6 (c) of Water Quality Regulation 2006, shall protect the riparian reserve by ensuring that no development activity is undertaken within the full width of the river or stream to a minimum of six (6) meters and a maximum of 30 meters on either side based on the highest recorded flow level.
- 2.3 The proponent shall put up and maintain a proper functional leachate collection and recycling system to prevent pollution of the subsoil, ground water and surface water bodies, and a buffer zone that shall separate the facility from the surrounding land uses throughout the project cycle.
- 2.4 The proponent shall design the facility to include infrastructure that shall securely store all organics, contaminated products, wastes, and process residues that cannot

be beneficially processed at the facility, until they can be lawfully disposed of at a relevant NEMA licenced waste disposal facility.

- 2.2 The proponent shall put up a project signboard as per the Ministry of Transport and Infrastructure showing the NEMA EIA license number among other details.
- 2.3 The proponent shall ensure that all excavated material and debris is collected, re-used and where need be, disposed off as per the Environmental Management and Coordination (Waste Management) Regulations of 2006.
- 2.4 The proponent shall ensure strict adherence to the provisions of Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
- 2.5 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.
- 2.6 The proponent shall ensure that workers are provided with adequate personal protection equipment (PPE), sanitary facilities as well as adequate training.
- 2.7 The proponent shall ensure that activities are undertaken during the day (and not at night) – between 08.00 hours and 17.00 hours and that transportation of construction materials to and from site are undertaken during weekdays (and not weekdays) off peak hours.
- 2.8 The proponent shall ensure strict adherence to the Environmental Management Plan developed throughout the project cycle.
- 2.9 The proponent shall ensure that the development adheres to zoning specifications issued for development of such a project within the jurisdiction of the Machakos County Government with emphasis on approved land use for the area.

### **3.0 Operational Conditions**

- 3.1 The proponent shall obtain an effluent discharge license from NEMA as per Environment Management and Coordination (Water Quality) Regulation, 2006 as soon as the treatment plant is operational.
- 3.2 The proponent shall put measures that shall ensure that all compost plants used for processing (e.g. in pre-treatment, decomposition, aeration and maturation) and the storage and or movement of raw organics and products must always be maintained and operated in an efficient manner to prevent air pollution (odor) from the premises.
- 3.3 The proponent shall put measures for minimizing particulate matter emissions from the facility.
- 3.5 The proponent shall design and implement methods and operating practices to screen incoming organics to ensure that only those organics permitted to be received at the facility are received and processed
- 3.6 The proponent shall ensure that the incoming and processed organics must be stored and managed in quantities not exceeding the design requirements.
- 3.7 The proponent shall minimize emissions of methane to air and diffusion through soil strata such that the risk to humans in confined spaces (such as explosions and suffocation) is minimal.
- 3.8 The proponent shall put up measures that shall prevent pollution of the groundwater or surface waters.

- 3.10 The proponent shall ensure that the sludge is treated and disposed off in a safe effective manner.
  - 3.11 The proponent shall adhere to conditions issued by Water Resource Management Authority for water use permits.
  - 3.12 The proponent shall ensure that latrines are constructed at suitable places so as to avoid contamination of water bodies and the subsequent water-borne diseases/vectors.
  - 3.13 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.
  - 3.14 The proponent shall ensure strict adherence to the provision of the Environmental Management and Coordination (Air Quality) Regulations of 2014
  - 3.15 The proponent shall ensure that all drainage facilities are fitted with adequate functional oil water separators and silt traps.
  - 3.16 The proponent shall ensure that rain water harvesting facilities are provided to supplement surface and ground water.
  - 3.17 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.
  - 3.18 The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations of 2006.
  - 3.19 The proponent shall ensure that all workers are well protected and trained as per the Occupational Safety and Health Act (OSHA) of 2007.
  - 3.20 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 Machakos County Government, Water Resources Management Authority, Ministry of Land, Housing and Urban Development and other relevant Authorities.
  - 3.21 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as soil erosion control, tree planting 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. **020 6006041 / 0786 101100** 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.

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