



**nema**  
mazingira yetu | uhai wetu | wajibu wetu

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

License No: NEMA/EIA/PSL/1431

Application Reference No: NEMA/EIA/SR/495

This is to certify that the Environmental Impact Assessment Study Report received from

**Krystalline Salt Limited (Mareleni).**

**P.O.Box 80856-80100, Mombasa.**

submitted to the National Environmental Management Authority in accordance with the Environmental Impact Assessment & Audit Regulations regarding **Proposed Expansion of Krystalline Salt Limited- Mareleni Salt Works.**

whose objective is to carry on

**Expansion of Krystalline Salt Limited Mareleni salt works involving the construction of new salt evaporating pans, new dykes and one pump in an approximate area of 800 hectares.**

located at

**Plot L.R.No.13427 off Malindi- Lamu Road, Kilifi County.**

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

Issue Date : **17 April, 2015**

Signature

(Seal)

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

**P. T. O.**



**ISO 9001 : 2008 Certified**

**1.0 General Conditions**

- 1.1 This project is for the expansion of the Krystalline Salt Limited - Marereni salt works involving the construction of new salt evaporating pans , new dykes and one pump in an approximate area of 800 hectares on plot L.R. No. 13427 off the Malindi-Lamu road, Kilifi County at an estimated cost of Kshs. 50 million.
- 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 pollution in respect of any manner of 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 provide the final project accounts (final project costs) on completion of construction phase. This should be done prior to project commissioning/operation/occupation.

1.10 The proponent shall comply with NEMA's improvement orders throughout the project cycle.

**2. Construction Conditions**

2.1 The proponent shall obtain the requisite approvals from the County government of Kilifi and all other relevant Authorities prior to commencement of works.

2.2 Since the project borders the sea, the proponent, Pursuant to regulation 6 (c) of the Water Quality Regulations 2006, shall protect the riparian by ensuring that **NO** development activity is undertaken within the full width of the sea to a minimum of sixty (60) metres based on the highest recorded flood levels.

2.3 The proponent shall ensure that the construction is done as per the approved drawings in adherence to the Building code 1968, and the provisions of the National Construction Act, 2011.

2.4 The proponent shall submit designs drawings of the proposed water and sewerage reticulation works to the area Water and Sewerage Services provider and the County Public Health Officer for approval prior to commencement of works.

2.5 The proponent shall design and implement a concise traffic management plan duly approved by the County Engineer and other relevant Authorities before commencement of works.

2.6 The proponent shall ensure that the storm drainage channels do not directly discharge of untreated waste water and any other debris into the nearby wetland.



- 2.7 The proponent shall ensure a buffer zone is maintained between the project area and the neighbouring developments to minimise any potential nuisance.
- 2.8 The proponent shall ensure access routes for the neighbouring community are developed and kept accessible.
- 2.9 The proponent shall conserve the existing wetland as it is a source of water for the local community.
- 2.10 The proponent shall regularize the utilization of the 353.278 Ha of the Mangrove area by obtaining a *Special Use License* from the Kenya Forest Service (KFS).
- 2.11 The proponent shall put up a project signboard as per the Ministry of Transport and Infrastructure Standards indicating the NEMA licence number among other information.
- 2.12 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 Coordination Management (Waste Management) Regulation 2006.
- 2.13 The proponent shall ensure strict adherence to the provisions of the Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
- 2.14 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.
- 2.15 The proponent shall ensure that construction workers are provided with adequate personal protection equipment (PPE), sanitary facilities as well as adequate training.
- 2.16 The proponent shall ensure that construction activities are undertaken during the day (and not at night) between 08.00 hrs and 17.00 hrs; and that transportation of construction material to site are undertaken during weekdays (and not weekends) off peak hours.
- 2.17 The proponent shall ensure the project will not encroach on any way-leave and road reserves.
- 2.18 The proponent shall ensure that the cooling systems employed are suitable alternatives with zero ozone depleting potential as per Environmental Management and Coordination (Controlled Substances) Regulations, 2007.
- 2.19 The proponent shall ensure that the development adheres to zoning specification issued for the development of such a project within the jurisdiction of the Kilifi County Government with emphasis on the approved land use for the area.
- 2.20 The proponent shall ensure strict adherence to the Environmental Management Plan developed throughout the project cycle.

### **3. Operational Conditions**

- 3.1 The proponent shall obtain authorization to drill any borehole from the Water Resource Management Authority before drilling and abstracting water.
- 3.2 The proponent shall obtain an effluent discharge license from NEMA for the proposed waste water treatment plant within the first year of operation.
- 3.3 The proponent shall ensure that rain water harvesting facilities are provided to supplement surface and ground water.
- 3.4 The proponent shall ensure that all waste water is disposed of as per the standards set out in the Environmental Management and Coordination (Water Quality) Regulations, 2006.

- 3.5 The proponent shall ensure that wood fuel as much as possible is not the main fuel used in the salt drying process. Alternative clean energy sources shall be explored and used. Should the proponent prefer wood fuel, then a sustainable source shall be planted and maintained by the proponent.
- 3.6 The proponent shall ensure that all drainage facilities are fitted with adequate functional oil water separators and silt traps.
- 3.7 The proponent shall ensure that appropriate and functional efficient air pollution control mechanisms are installed in the facility to control all air emissions.
- 3.8 The proponent shall ensure compliance with the provisions of the Energy (Solar Water Heating) Regulations, 2012.
- 3.9 The proponent shall ensure that all equipments used are well maintained in accordance with the Environmental Management and Coordination (Noise and Excessive Vibration Pollution Control) Regulations, 2009.
- 3.10 The proponent shall ensure that all solid waste is handled in accordance with the Environmental Management and Coordination (Waste Management) Regulations, 2006.
- 3.11 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 Kilifi County Government, Ministry of Lands, Housing and Urban Development, Ministry of Health, Kenya Urban Roads Authority, National Construction Authority, Directorate of Occupational Health and Safety Services, Water Resources Management Authority, Kilifi Water and Sewerage Company and other relevant Authorities.
- 3.12 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as functional landscaping and tree-planting, installation of water and energy-saving fixtures, emergency response plan, dust control measures, traffic management plan, functional storm drainage system, solid waste management plan, waste water management plan, security management plan, soil erosion control and noise abatement mechanisms are designed, constructed and employed simultaneously with the proposed project.

4. **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** 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 of its intent to decommission three months in advance in writing.

5. **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.