

Approved for tabling.

PARLIAMENT OF KENYA



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NA  
29/2/16



NATIONAL ASSEMBLY

ELEVENTH PARLIAMENT – FOURTH SESSION- 2016

DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES

REPORT ON THE PROPOSED SAND HARVESTING IN DIANI AT THE SOUTH  
COAST BY THE CHINA ROAD AND BRIDGE CORPORATION

CLERK'S CHAMBERS  
PARLIAMENT BUILDINGS,  
NAIROBI

FEBRUARY, 2016

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## 1.0 PREFACE

Mr. Speaker,

On behalf of the Departmental Committee on Environment and Natural Resources and pursuant to provisions of Standing Order 199(6), it is my pleasant privilege and honour to present to this House the Report of the Committee on the proposed sand harvesting in Diani at the south coast by the China Road and Bridge Corporation.

## 1.1 MANDATE OF THE COMMITTEE

The functions and mandate of the Committee include:-

- a) Investigate, inquire into, and report on all matters relating to the mandate, management, activities, administration, operations and estimates of the assigned Ministries and departments;
- b) Study the programme and policy objectives of the Ministries and departments and the effectiveness of the implementation;
- c) Study and review all legislation referred to it;
- d) Study, access and analyze the relative success of the Ministries and Departments as measured by the results obtained as compared with its stated objectives;
- e) Investigate and inquire into all matters relating to the assigned Ministries and departments as they may deem necessary, and as may be referred to them by the House;
- f) Vet and report on all appointments where the constitution or any law requires the National Assembly to approve, except those under Standing Order 204; and
- g) Make reports and recommendations to the House as often as possible, including recommendation of proposed legislation.

The subject matter of the Departmental Committee on Environment and Natural Resources are stated in the Second Schedule of the National Assembly Standing Order as: climate change, environment management and conservation, forestry, water resource management, wildlife, mining and natural resources, pollution and waste management.

## 1.2 MEMBERSHIP OF THE COMMITTEE

The Committee comprises the following members:-

1. Hon. Amina Abdalla, M.P., CBS - **Chairperson**
  2. Hon. A. K. Kosgey, M.P. - **Vice Chairperson**
  3. Hon. Alice Ng'ang'a, M.P.
  4. Hon. Samuel Ndiritu, M.P.
  5. Hon. Aisha Jumwa Karisa, M.P.
  6. Hon. Ejidius Njogu Barua, M.P.
  7. Hon. Jude Njomo, M.P.
  8. Hon. Moitalel Ole Kenta, M.P.
- 
9. Hon. Kathuri Murungi, M.P.
  10. Hon. Sunjeev Birdi, M.P.
  11. Hon. Jackson K. Rop, M.P.
  12. Hon. Abdi Noor Ali, M.P.
  13. Hon. Joyce Emanikor, M.P.
  14. Hon. Abdulaziz Farah, M.P.
  15. Hon. Ronald Tonui, M.P.
  16. Hon. (Dr.) Reginalda Wanyonyi, M.P.
  17. Hon. Gideon Mwiti, M.P.
  18. Hon. Hassan Dukicha, M.P.
  19. Hon. Chachu Ganya, M.P.
  20. Hon. Opiyo Wandayi, M.P.
  21. Hon. Charles G. Mongare, M.P.
  22. Hon. (Dr.) Wilber K. Ottichilo, M.P.
  23. Hon. Khatib Mwashetani, M.P.
  24. Hon. George Ogalo, M.P.
  25. Hon. (Major) Muluvi Mutua, M.P.
  26. Hon. Mohamed, Diriye M.P.
  27. Hon. Peter Kinyua, MP.
  28. Hon. Shukra Hussein Gure, M.P.

### 1.3 CONSIDERATION OF THE MATTER

Members of the Kenya Association of Hotel Keepers and Caterers wrote to the Committee raising concerns on the effects of sand harvesting activities by CRBC off Likoni to North of Tiwi South of the Indian Ocean for the construction of the Port Reitz Cargo Terminal of the Mombasa Standard Gauge Railway project (SGR).

Following concerns raised by the Kenya Association of Hotel Keepers and Caterers the committee resolved to inquire into the matter with a view to establishing the potential harmful effects of the sand harvesting project at the off Likoni to North of Tiwi South of the Indian Ocean and if due process was followed before licensing of the contractor, (China Road and Bridge Corporation).

The Committee sought to address the matter by holding meetings with the National Environment Management Authority, China Road and Bridge Corporation (CRBC), Kenya Association of Hotel Keepers and Caterers and other stakeholders in the south coast.

The following Members held a meeting with stakeholders at the Diani Reef Hotel, Kwale County:-

1. Hon. Amina Abdalla, C.B.S, M.P – **Leader of the Delegation**
2. Hon. Wilber Ottichillo, M.P
3. Hon. Khatib Mwashetani, M.P.
4. Hon. Charles Mong'are Geni, M.P.
5. Hon. Ronald Tonui, M.P.
6. Hon. (Dr.) Reginalda Wanyonyi, M.P.
7. Hon. Dukicha Hassan, M.P.
8. Hon. Samuel Ndiritu, M.P
9. Hon. Barua Njogu, M.P.

## 1.4 COMMITTEE OBSERVATIONS

Following the meetings with various stakeholders the Committee made the following observations:-

1. Given the magnitude of the proposed sand harvesting project, the EIA carried out was not sufficient and instead an extensive study should have been done;
  2. Some of the conditions of licensing issued by NEMA were unrealistic such as one listed in the sand harvesting conditions stating 'the proponent shall ensure that rare, threatened and endangered species are identified and carefully relocated prior to commencement of works;
  3. NEMA appears to take cover in unrealistic licence conditions rather than decline to licence: and has consistently blamed lead agencies for not providing appropriate advise;
- 
4. Despite the stakeholder assertion to the contrary, neither China Bridges nor Kenya Ports Authority were undertaking any sand harvesting during the period under review;
  5. The Kenya Marine & Fisheries Research Institute is a key institute mandated to protect the Marine ecosystem yet it seems to be dwarfed by other agencies.


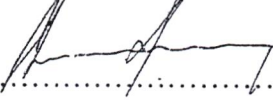


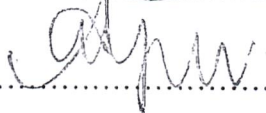


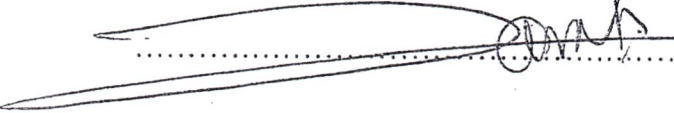
## 1.5 COMMITTEE RECOMMENDATIONS

The Committee makes the following recommendations:-

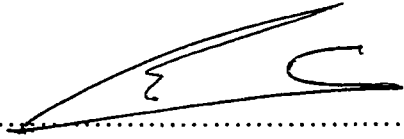
1. A full EIA study on the sand harvesting project should be carried out;
2. Sand harvesting at the south coast, which has protected areas with fragile marine ecosystem should not be allowed and the proponent should consider alternative source of sand in order to protect the marine ecosystem at the south coast;
3. Fishermen affected by sand harvesting should provide their details to KPA so as to lodge for compensation;
4. There is need to strengthen the Kenya Marine & Fisheries Research Institute to be able to execute its mandate effectively;
5. The Environmental Management and Coordination Act needs further amendment to address this lacuna where any short coming of an EIA licence becomes a blame game between NEMA and lead agencies.

### 1.6 Adoption of the Report

We the Members of the Departmental Committee on Environment and Natural Resources have pursuant to Standing Order 199 adopted this report and affix our signatures to affirm our approval and confirm its accuracy, validity and authenticity:

1. Hon. Amina Abdalla, M.P. 
2. Hon. Alexander K. Kosgey, M.P. 
3. Hon. Alice Ng'ang'a, M.P. ....
4. Hon. Samuel Ndiritu, M.P. ....
5. Hon. Aisha Jumwa Karisa, M.P. ....
6. Hon. Ejidius Njogu Barua, M.P. ....
7. Hon. Jude Njomo, M.P. ....
8. Hon. Moitalel Ole Kenta, M.P. 
9. Hon. Kathuri Murungi, M.P. 
10. Hon. Sunjeev Birdi, M.P. 
11. Hon. Jackson K. Rop, M.P. ....
12. Hon. Abdi Noor Ali, M.P. 
13. Hon. Joyce Emanikor, M.P. 
14. Hon. Abdulaziz Farah, M.P. 
15. Hon. Ronald Tonui, M.P. ....
16. Hon. (Dr.) Reginalda Wanyonyi, M.P. ....

17. Hon. Gideon Mwiti, M.P.



18. Hon. Hassan Dukicha, M.P.



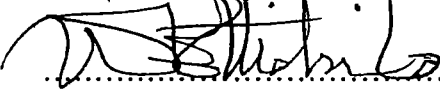
19. Hon. Chachu Ganya, M.P.




20. Hon. Opiyo Wandayi, M.P.



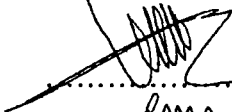
21. Hon. Charles G. Mengere, M.P.



22. Hon. (Dr.) Wilber K. Ottichilo, M.P.



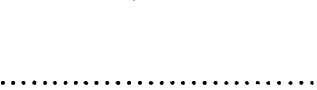
23. Hon. Khatib Mwashetani, M.P.



24. Hon. George Ogalo, M.P.



25. Hon. (Major) Muluvi Mutua, M.P.



26. Hon. Mohamed, Diriye M.P.



27. Hon. Peter Kinyua, MP.



28. Hon. Shukra Hussein Gure, M.P.





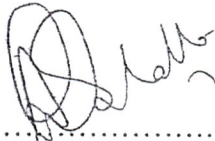
**1.7 ACKNOWLEDGEMENT**

The Committee wishes to register its appreciation to the offices of the Speaker and the Clerk of the National Assembly for the support accorded to the Committee in the execution of its mandate.

I take this opportunity to thank all members of the Committee for their patience, endurance and dedication to Committee business despite their other commitments and tight schedules which enabled the Committee to consider the Petition and respond to the Petitioner through the report.

On behalf of the Departmental Committee on Environment and Natural Resources and pursuant to Standing Order 199 of the National Assembly I now have the honor to present the Committee Report of its inquiry into the proposed sand harvesting from off Likoni to North of Tiwi South Coast at the South Coast by the China Road and Bridge Corporation.

Thank You,



SIGNED .....

**CHAIRPERSON**

**(HON. ABDALLA AMINA, MP, CBS)**

DATE .....

18/2/2016

## 2.0 BACKGROUND

The China Road and Bridge Corporation proposes to harvest 800,000 M<sup>3</sup> of sand from off Likoni to North of Tiwi South of the Indian Ocean for the construction of the Port Reitz Cargo Terminal of the Mombasa Standard Gauge Railway project (SGR). While the SGR project will bring immense benefits to the nation, the sand harvesting at the Diani beach will affect the marine eco-system at the area that is known globally for its pristine marine tourism.

### 2.1 Concerns by Kenya Association of Hotel Keepers and Caterers (KAHC)

The Association of Hotel Keepers and Caterers (KAHC) petitioned to the Committee on the effects of sand harvesting at the south coast to the marine life and boomerang effect this would have on the tourism and fishing activities. This would affect hotel owners who earn their living from tourism and the fishermen whose livelihood is fishing. The KAHC complained that a project of such magnitude should have been subjected to a full EIA study with extensive stakeholder participation as opposed to the project report that was prepared.

The Kenya Association of Hotel Keepers and Caterers sought the following interventions, that:-

- i). No dredging or sand harvesting should be authorized on the said eco-system including the shoreline or offshore within the coral reef;
- ii). The EIA license issued to the contractor (China Road and Bridge Corporation) be revoked;
- iii). The operation be outlawed in totality at the South Coast.

### 3.0 FINDINGS

The Committee in its inquiry held meetings with various stakeholders:

#### 3.1 MEETING WITH KENYA ASSOCIATION OF HOTEL KEEPERS AND CATERERS (KAHC)

The Committee invited KAHC for a meeting on 14<sup>th</sup> July, 2015. The Chair of the Association, **Mr. Sam Ikwaye**, informed the Committee, that:-

- (i) The Kenya Association of Hotelkeepers and Caterers have huge investments along the South Coast beaches including Hotels, cottages and other tourism related business and employs over 4,000 people directly and 10,000 indirectly;
- (ii) The proposed harvesting of sand on Diani Beach in Kwale County poses threats to the environment and to the livelihoods of the residents and the country at large;
- (iii) The Environmental and Management Coordination Act (EMCA) 1999 requires that a project of such a magnitude should be subjected to a full EAI study report with extensive stakeholders involvement;
- (iv) The public was not involved in the preparation of this EIA report as should be the case;
- (v) The ongoing illegal dredging is causing destruction of the marine ecosystem by destroying sea grass, fish breeding sites, corals and turtle nesting sites. These have a direct impact on fish stocks, impacting on the livelihoods of fishermen and damage the attractive value of diving sites;
- (vi) The dredger has been noted collecting sand within the Diani – Chale Marine National Reserves even before the end of the thirty days' notice to submit comments to NEMA on the project report;
- (vii) The EIA report is not specific and does not adequately describe the effects of dredging to the environmental and socioeconomic wellbeing and does not address the standard terms of reference for ESIA/EIA studies;
- (viii) The sediments dumped into the ocean after sand harvesting are likely to be washed back to the South Coast beach by ocean currents,
- (ix) The proposed mitigation cited in the report is inadequate and unrealistic within the proposed project period i.e. the proponent having proposed to compensate fishermen up

to Kshs. 3 million within six months. This is not practical considering the process of compensation against proposed project time;

- (x) The aquatic and biotic lives are not recorded. They need to be recorded so that the existing numbers can be known; and
- (xi) The report states that sand is to be harvested twenty four hours a day but the regulations states that harvesting was to be done as from 6am to 6pm.

### **3.2 MEETING WITH STAKEHOLDERS - STAKEHOLDERS FORUM**

The Committee held a meeting with stakeholders at the Diani Reef Hotel on 14<sup>th</sup> August, 2015. The stakeholders present included the County Commissioner, Kwale; the County Executive for Tourism; representatives from NEMA, KEMFRI, KAHK, Kenya Association of Tour Operators; Fishermen and Marine experts.

#### **A. Mr. Mwafitina - a representative of the Fishermen**

He informed the Committee that:-

- i). Sand harvesting has been going on since 2011 by the Kenya Ports Authority;
- ii). Their livelihoods has been affected as they could no longer carry out fishing in the area;
- iii). KPA was supposed to compensate the fishermen and also give them boats to enable them to carry out deep sea fishing, a promise that has not been kept to present.

#### **B. Ms. Solanke - The Chairperson, Kenya Association of Tour Operators, Coast region**

She informed the Committee that:-

- i). Snorkelling and other ocean activities had been affected by the sand harvesting;
- ii). Fish had also become expensive and therefore unaffordable to most residents of the area;  
and
- iii). The area was experiencing drastic reduction of tourists hence affecting the tour operator's source of income.

### **C. Mr. Elias Kamau – representative of the World Wildlife Foundation**

He informed the Committee that:-

- i). CRBC was going to undertake sand harvesting in the same area where KPA had been harvesting sand, this would exacerbate the negative effects left behind by KPA;
- ii). The licensing conditions by NEMA are unrealistic for instance ‘*that CRBC relocates marine life*’ which is not feasible;
- iii). The license by NEMA be revoked and the site subjected a full EIA study.

### **D. Kenya Marine and Fisheries Research Institute**

The representative from Kenya Marine and Fisheries Research Institute present informed the Committee that:-

- i). The EIA carried out was flawed and a full EIA study should be done;
  - ii). The Tiwi area is bordered by coordinates of marine protected areas;
  - iii). The Diani-Chale area earns over US \$1.41 billion a year, contributing 55% and 17 % of the total coastal and national tourism earnings respectively.
  - iv). KMFRI had participated in filing the questionnaire provided by the consultant for the project and raised the negative socio-economic and environmental effects anticipated from sand harvesting activity such as the increased turbidity of water due to dredging of sediments impacting on coral reefs and sea grass beds;
  - v). One of the proposed measures was to look for alternatives of sand available at River Sabaki; and
  - vi). Experts should be engaged to map out ecologically sensitive areas/ habitats in Mombasa/ Tiwi areas.
- KMFRI submitted a formal brief on their comments which is attached to this Report

### **E. Adan Keek - County Executive Member for Tourism, Kwale County**

He informed the Committee that:-

- i). The county was concerned over the effects of the sand harvesting;
- ii). The fishermen were yet to be compensated by the KPA and yet their livelihoods had been affected;

- iii). There were gaps in the EIA carried and called for a full EIA study; and
- iv). Base titanium should be considered as an alternative source of fillers.

#### **F. National Environment Management Authority (NEMA)**

The NEMA official present informed the Committee that:-

- i). A full EIA study is required in a highly sensitive eco-system but if the report done is detailed and authenticated by lead agencies that mitigating concerns have been dealt with a full study may not be required;
  - ii). Some level of public participation had taken place but could not confirm whether it met the required threshold;
- 
- iii). The licensing was done at the headquarters therefore insinuating possibility of lack of transparency at the headquarters; and
  - iv). NEMA is facing institutional challenges as it acts on the advice of lead agencies and yet was blamed when there were problems.

### **3.3 MEETING WITH THE CHINA ROAD AND BRIDGE CORPORATION (CRBC)**

The Committee held a meeting with China Road and Bridge Corporation on 20<sup>th</sup> August, 2015. During the meeting Prof. Jacob Kibwage, the EIA Consultant informed the Committee, that:-

- (i) CRBC requires 800,000 m<sup>3</sup> which will be used as backfilling material for the reclamation works of the Port Reitz Railway Container Terminal;
- (ii) The sand harvesting project is estimated to take 6-8 months;
- (iii) CRBC has not started any sand harvesting at the area but KPA has been harvesting sand at the area for the last two years;
- (iv) KPA had signed an MOU with the Kwale County Government to undertake the sand harvesting but had failed to meet the conditions of MOU;
- (v) Alternative materials such titanium waste and river-bed sand would be unsustainable and could lead to marine pollution as it entailed introducing foreign elements into the sea;
- (vi) Sea sand is the best material for the project due to the nature of its characteristics, as its small particle sizes ensures stability and this cannot be realised from the alternative materials;

- (vii) CRBC is planning to undertake sand harvesting along a strip of 400 metres to 1 kilometre offshore Indian Ocean from Likoni through Waa to Tiwi shorelines, the same area and location at which Kenya Ports Authority with financing from the Government of Japan/ JICA is harvesting sand to construct the Terminal II for the port of Mombasa;
- (viii) Wide and exhaustive stakeholder consultations were held with state agencies namely National Environment Management Authority (NEMA), Kenya Marine Authority (KMA), Kenya Wildlife Service (KWS), Kenya Navy, Kenya Marine and Fisheries Research Institute, the Kwale County Government Representatives, members of Kenya Association of Hotel Keepers and Caterers and fishermen;
- (ix) No sand harvesting would be done at the Diani Beach and other ecologically sensitive areas;
- (x) The Corporation (CRBC) was in the process of negotiating with the county government of Kwale on the mechanisms for compensating the fishermen who would be affected during the period of sand harvesting, the compensation would either be monetary or through employment by CRBC; and
- (xi) In the EIA report CRBC had indicated mitigating measures on the sand harvesting.

#### **3.4 MEETING WITH THE NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA)**

The Committee held a meeting with the National Environment Management Authority on 27<sup>th</sup> August, 2015. During the meeting Prof. Geoffrey Wahungu, Director General, NEMA informed the Committee that:-

- a) The EIA project report for the proposed sand harvesting project was submitted on 5<sup>th</sup> March, 2015 and the proponent proposed to harvest 800,000 cubic metres of sand at an estimated depth of 19-50 metres in a strip of 0.4-1.0km offshore in the Indian Ocean; The file was dispatched to the lead agencies: the Kenya Maritime Authority; Kenya Marine and Fisheries Research Institute in Mombasa; Kenya Wildlife Services, the Sub –regional Manager, Water Resource Management Authority (Athi Catchment Area), the principal Secretary, Ministry of Mining, the NEMA County Director (Kwale) and the Governor of Kilifi County;
- b) The above gave specific recommendations and measures to be observed while undertaking the sand harvesting activities;

- c) NEMA further sought written commitment from the proponent to initiate consultations with the affected fishermen through their respective Beach management units;
- d) The EIA report contained evidence of stakeholder consultation in the form of minutes of meetings that were held at Kaskazi Beach Hotel, Matuga – Tiwi area, Ng’ombeni village, KMA boardroom and site visits;
- e) NEMA licensed the project on 22<sup>nd</sup> May, 2015 and the decision was guided by the applicable decision making principles of using the ecosystem approach, considering alternatives, using a hierarchy to mitigate impacts, applying precautionary principle, risk assessment, involvement of all relevant stakeholders and adherence to the three simultaneous concept;
- ~~f) The sand harvesting operation was to be confined to the area along Tiwi to Waa area and no sand harvesting to be undertaken in Diani area;~~
- g) The operations were to keep off marine parks, natural monuments, tourist areas, sea grass habitats areas and other ecologically sensitive area;
- h) A resettlement and compensation action plan be worked out between the County Government of Kwale, the Beach Management Units, other interest groups and the proponent for possible loss of livelihoods as a result of the project;
- i) The sand harvesting operations shall be monitored by NEMA, the Kenya Wildlife Services, Kenya Marine and Fisheries Institute, Kenya Ports Authority, Kenya Maritime Authority and other research agencies to ensure the integrity of the affected environment is maintained; and
- j) The environmental protection facilities and measures be put in place by the proponent to ensure the ecological integrity of the sand harvesting area is preserved.

### **3.5 MEETING WITH THE KENYA PORTS AUTHORITY**

The Committee held a meeting with Kenya Ports Authority on Thursday, 15<sup>th</sup> October, 2015.

Mr. Gichiri Ndua, the Managing Director, KPA informed the Committee that:

- i). KPA had done an EIA for the Mombasa Port Development Project (MPDP) in 2007 but had not done a specific EIA on sand harvesting;
- ii). The amount of sand required for phase 1 of the project was 7.5 million cubic metres, the sand borrow pit extended from Shelly Beach to Tiwi Beach with sand harvesting concentrated in the Tiwi Beach area of the borrow pit;



- iii). During the life of the MPDP, KPA conducted monthly monitoring of the environment and submitted monthly reports to NEMA;
- iv). KPA completed Phase 1 of the project in September 2013 and had not conducted any sand harvesting since then;
- v). Phase 1 of the project was done within the frameworks of the EIA of the MPDP;
- vi). KPA was planning on embarking on phase 2 and 3 of the project once negotiations with stakeholders were completed;
- vii). KPA had no existing MOU with the Kwale County Council;
- viii). A post-project report indicated that the project had no adverse effect on the marine ecosystem and hence there was no basis for compensations since there was no evidence of negative effects:
- ix). Following complaints by fishermen, KPA had conducted field observations, carried out lab tests and used fishing data analysis all of which showed that there was no evidence of losses or negative environmental impacts of the sand harvesting activities;
- x). There was a misunderstanding over the offer of boats to fisherman as KPA had only planned to do it as part of its Corporate Social Responsibility and not compensation;
- xi). Sea sand was preferred because it was the most suitable for reclamation as introducing foreign matter into the sea (such as river sand or trillings from Titanium) would affect the sea ecosystem. Also given the amount of sand needed, **800 million cubic metres**, it would not be feasible to obtain it from land.

#### 4.0 COMMITTEE OBSERVATIONS

Following the meetings with various stakeholders the Committee makes the following observations:-

1. Given the magnitude of the proposed sand harvesting project, the EIA carried out was not sufficient and instead an extensive study should have been done;

2. Some of the conditions of licensing issued by NEMA were unrealistic such as one listed in the sand harvesting conditions stating 'the proponent shall ensure that rare, threatened and endangered species are identified and carefully relocated prior to commencement of works;
3. NEMA appears to take cover in unrealistic licence conditions rather than decline to licence: and has consistently blamed lead agencies for not providing appropriate advise:
4. Despite the stakeholder assertion to the contrary neither China Bridges nor Kenya Ports Authority were undertaking any sand harvesting during the period under review:
5. The Kenya Marine & Fisheries Research Institute is a key institute mandated to protect the Marine ecosystem yet it seems to be dwarfed by other agencies.

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## 5.0 COMMITTEE RECOMMENDATIONS

The Committee makes the following recommendations:-

1. A full EIA study on the sand harvesting project should be carried out;
2. Sand harvesting at the south coast, which has protected areas with fragile marine ecosystem should not be allowed and the proponent should consider alternative source of sand in order to protect the marine ecosystem at the south coast;
3. Fishermen affected by sand harvesting should provide their details to KPA so as to lodge for compensation;
4. There is need to strengthen the Kenya Marine & Fisheries Research Institute to be able to execute its mandate effectively;
5. The Environmental Management and Coordination Act needs further amendment to address this lacuna where any short coming of an EIA licence becomes a blame game between NEMA and lead agencies.

APPENDEX ONE

MINUTES



**MINUTES OF THE 7<sup>TH</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON THURSDAY FEBRUARY 18<sup>TH</sup>, 2016 AT 10.30 AM CPA ROOM, MAIN PARLIAMENT BUILDING.**

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**PRESENT**

1. Hon. Abdalla Amina, M.P. – **Chairperson.**
2. Hon. Alexander Kosgey, M.P. – **Vice Chairperson.**
3. Hon. Wandayi James Opiyo, M.P.
4. Hon. Dr. Wanyonyi Reginalda N. M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Kathuri Murungi, M.P.
7. Hon. Ottichillo K. Wilber, M.P.
8. Hon. Abdinoor Mohammed Ali, M.P.
9. Hon. Ole Kenta Richard Moitalel, M.P.
10. Hon. Muluvi Marcus Mutua, M.P.
11. Hon. Emanikor Joyce, M.P.
12. Hon. Farah, Abdulaziz Ali, M.P.
13. Hon. Irea Gideon Mwiti, M.P.
14. Hon. Ganya Francis Chachu, M.P.
15. Hon. Ogalo George Oner, M.P.
16. Hon. Gure Shukra Hussein, M.P.

**APOLOGIES**

1. Hon. Dukicha Hassan Abdi, M.P.
2. Hon. Geni Charles Mong'are, M.P.
3. Hon. Rop Jackson Kipkorir, M.P.
4. Hon. Ng'ang'a Alice Wambui, M.P.
5. Hon. Mwashetani Khatib, M.P.
6. Hon. Katana Aisha Jumwa, M.P.
7. Hon. Peter Kinyua, M.P.
8. Hon. Mohamed Diriye Abdullahi, M.P.
9. Hon. Jude Njomo, M.P.
10. Hon. Tonui Ronald Kiprotich, M.P.
11. Hon. Barua Ejidius Njogu, M.P.
12. Hon. Ndiritu Samuel Mathenge, M.P.

**THE NATIONAL ASSEMBLY**

1. Ms. Chebet Koskei - Clerk Assistant II
2. Mr. Hassan A. Arale -Clerk Assistant III
3. Mrs. Amran Yunis -Fiscal Analyst
4. Mr. James Muguna - Research Officer
5. Mr. Stephen Nyakuti -Hansard

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**MIN.NO. DC/ENR/026/2016- PRELIMINARIES**

The meeting was called to order at 10.30 am after which prayers were said. The chair then welcomed the members.

**MIN.NO.DC/ENR/027/2016: ADOPTION OF REPORT ON THE INQUIRY INTO THE ALLEGED LEAD POISONING AT THE OWINO- UHURU VILLAGE IN MAKINDI MOMBASA BY METAL REFINERY EPZ LIMITED AND MAX INDUSTRIES.**

The committee went through the report and unanimously adopted after it was proposed by Hon. Dr. Wilber K. Ottichilo, M.P and seconded by Hon.Gideon Mwiti, M.P  
And the committee also considered and adopted unanimously the **REPORT ON THE PROPOSED SAND HARVESTING IN DIANI AT THE SOUTH COAST BY THE CHINA ROAD AND BRIDGE CORPORATION** after it was proposed by Hon. Abdinoor Mohamed Ali, M.P and seconded by Hon. Moitalel Ole Kenta, M.P.

**MIN.NO. DC/ENR/028/2016 ADJOURNMENT**

There being no other business the meeting was adjourned at 11.10 AM.

SIGNED.....  
(Chairperson)

DATE

MINUTES OF THE 71<sup>ST</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON THURSDAY OCTOBER 15<sup>TH</sup>, 2015 AT 10.00 AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS

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PRESENT

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Geni Charles Mong'are, M.P.
3. Hon. Ottichillo K. Wilber, M.P
4. Hon. Wandayi James Opiyo, M.P.
5. Hon. Dr. Wanyonyi Reginalda N. M.P.
6. Hon. Ganya Francis Chachu, M.P.
7. Hon. Tonui Ronald Kiprotich, M.P
8. Hon. Mohamed Diriye Abdullahi, M.P.
9. Hon. Barua Ejidius Njogu, M.P.
10. Hon. Farah, Abdulaziz Ali, M.P
11. Hon. Kathuri Murungi, M.P.
12. Hon. Ndiritu Samuel Mathenge, M.P
13. Hon. Ogalo George Oner, M.P.
14. Hon. Ole Kenta Richard Moitalel, M.P.
15. Hon. Muluvi Marcus Mutua, M.P.
16. Hon. Abdinoor Mohammed Ali, M.P.
17. Hon. Mwashetani Khatib, M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Jude Njomo, M.P.
3. Hon. Irea Gideon Mwiti, M.P.
4. Hon. Emanikor Joyce, M.P.
5. Hon. Peter Kinyua, M.P.
6. Hon. Rop Jackson Kipkorir, M.P.
7. Hon. Gure Shukra Hussein, M.P.
8. Hon. Ng'ang'a Alice Wambui, M.P.
9. Hon. Katana Aisha Jumwa, M.P.
10. Hon. Dukicha Hassan Abdi, M.P.
11. Hon. Sunjeev Kaur Birdi, M.P.

IN-ATTENDANCE

KENYA PORTS AUTHORITY

1. Mr. Gichiri Ndua, MBS – Managing Director, KPA
2. Eng. A.M. Samator – General Manager, Infrastructure Development
3. Mr. Omae Nyaradi – General Manager, Corporate Services

4. Mr. Michael Okumu – Environment Consultant

#### THE NATIONAL ASSEMBLY

1. Ms. Chebet Koskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III
3. Mr. Noah Arap Too – Senior Research Officer
4. Ms. Lynnet Otieno - Legal Counsel II

#### MIN.NO. DC/ENR/302/2015 - PRELIMINARIES

- 
- I. The Chair called the meeting to order at 10.20 am after which prayers were said, followed by a round of introductions.
  - II. The chairperson introduced the Agenda of the day and informed the Members that the Committee was carrying out investigations on illegal sand harvesting at the South Coast. KPA had been invited following information it was KPA that was carrying out sand harvesting as opposed to China Road and Bridge Corporation.

#### MIN. NO. DC/ENR/303/2015 – SUBMISSION BY THE MANAGING KENYA PORTS AUTHORITY

Mr. Gichiri Ndua, Managing Director, KPA informed the Committee that:

- i). KPA had done an EIA for the Mombasa Port Development Project (MPDP) in 2007 but had not done a specific EIA on sand harvesting;
- ii). The amount of sand required for phase 1 of the project was 7.5 million cu.m, the sand borrow pit extended from Shelly Beach to Tiwi Beach with sand harvesting concentrated in the Tiwi Beach area of the borrow pit;
- iii). During the life of the MPDP, KPA conducted monthly monitoring of the environment and submitted monthly reports to NEMA;
- iv). KPA completed Phase 1 of the project in September 2013 and had not conducted any sand harvesting since then;
- v). Phase 1 of the project was done within the frameworks of the EIA of the MPDP;
- vi). KPA was planning on embarking on phase 2 and 3 of the project once negotiations with stakeholders were completed;
- vii). KPA had no existing MOU with the Kwale County Council
- viii). A post-project report indicated that the project had no adverse effect on the marine eco-system and hence there was no basis for compensations since there was no evidence of negative effects
- ix). Following complaints by fishermen, KPA had conducted field observations, carried out lab tests and used fishing data analysis all of which showed that there



was no evidence of losses or negative environmental impacts of the sand harvesting activities;

- x). There was a misunderstanding over the offer of boats to fisherman as KPA had only planned to do it as part of it Corporate Social Responsibility and not compensation;
- xi). Sea sand was preferred because it was the most suitable for reclamation as it would introducing foreign matter into the sea would affect the sea ecosystem. Also given the amount needed, 800 million cu.m it would not be feasible to obtain from land.

**Conclusion**

The Committee concluded that there was need for fishermen who had been affected to register their complaints with KPA.

Consideration of the Senate Amendments to the Mining Bill, 2014

The Committee considered Clauses 20, 21, 40 and 5 and concluded as follows:

**MIN.NO. DC/ENR/304/2015 ADJOURNMENT**

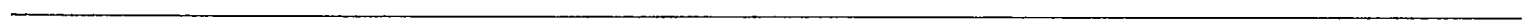
There being no other business the meeting was adjourned at Quarter past Twelve O'clock.

SIGNED.....

PP (Chairperson)

DATE..... 22<sup>nd</sup> Oct 2015

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MINUTES OF THE 61<sup>ST</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON THURSDAY 27<sup>TH</sup> AUGUST, 2015 AT 10.00AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS.

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PRESENT

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Kathuri Murungi, M.P.
3. Hon. Sunjeev Kaur Birdi, M.P.
4. Hon. Abdinoor Mohammed Ali, M.P.
5. Hon. Wandayi James Opiyo, M.P.
6. Hon. Ole Kenta Richard Moitalel, M.P.
7. Hon. Farah Abdulaziz Ali, M.P.
8. Hon. Geni Charles Mong'are, M.P.
9. Hon. Muluvi Marcus Mutua, M.P.
10. Hon. Ndiritu Samuel Mathenge, M.P.
11. Hon. Mwashetani Khatib, M.P.
12. Hon. Tonui Ronald Kiprotich, M.P.
13. Hon. Ganya Francis Chachu, M.P.
14. Hon. Emanikor Joyce, M.P.
15. Hon. Ottichilo Wilber Khasilwa, M.P.
- 16.

APOLOGIES

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Jude Njomo, M.P.
3. Hon. Dukicha Hassan Abdi, M.P.
4. Hon. Ng'ang'a Alice Wambui, M.P.
5. Hon. Gure Shukra Hussein, M.P.
6. Hon. Irea Gideon Mwiti, M.P.
7. Hon. Katana Aisha Jumwa, M.P.
8. Hon. Peter Kinyua, M.P.
9. Hon. Barua Ejidius Njogu, M.P.
10. Hon. Dr. Wanyonyi Reginalda N. M.P.
11. Hon. Ogalo George Oner, M.P.
12. Hon. Mohamed Diriye Abdullahi, M.P.
13. Hon. Rop Jackson Kipkorir, M.P.

IN-ATTENDANCE

THE NATIONAL ENVIRONMENTAL MANAGEMENT AUTHORITY

1. Prof. Geoffrey Wakhungu - Director General, NEMA
2. Ms. Irene Kamunge – Director Legal Services, NEMA
3. Mr. Francis Chwanya – Compliance and Enforcement Officer, NEMA

## THE NATIONAL ASSEMBLY

1. Ms. ChebetKoskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III
3. Ms. Lynette Otieno - Legal Counsel II

## MIN. NO. DC/ENR/267/2015 - PRELIMINARIES

The Chair called the meeting to order at 10.25 am and a word of prayer was said followed by a round of introduction.

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## MIN. NO. DC/ENR/268/2015 – MEETING WITH THE DIRECTOR GENERAL REGARDING SAND HARVESTING IN DIANI BEACH KWALE COUNTY

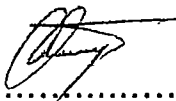
The Director General Prof. Geoffrey Wakhungu informed the Committee as follows:  
That,

- a) The EIA project report for the proposed sand harvesting project was submitted on 5<sup>th</sup> March, 2015 and the proponent proposed to harvest 800,000 cubic metres of sand at an estimated depth of 19-50 metres in a strip of 0.4-1.0km offshore in the Indian Ocean; The file was dispatched to the lead agencies: the Director, Kenya Maritime Authority; the Director, Kenya Marine and Fisheries Research Institute in Mombasa; the Director Kenya Wildlife Services, the Sub – regional Manager, Water Resource Management Authority (Athi Catchment Area), the Principal Secretary, Ministry of Mining, the NEMA County Director (Kwale) and the Governor of Kilifi County;
- b) The above gave specific recommendations and measures to be observed while undertaking the sand harvesting activities;
- c) NEMA further sought written commitment from the proponent to initiate consultations with the affected fishermen through their respective Beach management units;
- d) The EIA report contained evidence of stakeholder consultation in the form of minutes of meetings that were held at Kaskazi Beach Hotel, Matuga – Tiwi area, Ng’ombeni village, KMA boardroom and site visits;
- e) NEMA licensed the project on 22<sup>nd</sup> May, 2015 and the decision was guided by the applicable decision making principles of using the ecosystem approach, considering alternatives, using a hierarchy to mitigate impacts, applying precautionary principle, risk assessment, involvement of all relevant stakeholders and adherence to the three simultaneous concept;
- f) The sand harvesting operations was to be confined to the area along Tiwi to Waa area and no sand harvesting to be undertaken in Diani area;
- g) The operations were to keep off marine parks, natural monuments, tourist areas, sea grass habitats areas and other ecologically sensitive area;
- h)

- i) The ocean was considered for sourcing the sand because the ocean is more resilient than terrestrial land and its recovery would also take a shorter time.
- j) A resettlement and compensation action plan be worked out between the County Government of Kwale, the Beach Management Units, other interest groups and the proponent for possible loss of livelihoods as a result of the project;
- k) The sand harvesting operations shall be monitored by NEMA, the Kenya Wildlife Services, Kenya Marine and Fisheries Institute, Kenya Ports Authority, Kenya Maritime Authority and other research agencies to ensure the integrity of the affected environment is maintained; and
- l) The environmental protection facilities and measures be put in place by the proponent to ensure the ecological integrity of the sand harvesting area is preserved.
- m) In the Environmental Management Plan submitted by the proponent all relevant lead agencies will be involved in the monitoring of the site.

MIN.NO. DC/ENR/269/2015 ADJOURNMENT

There being no other business the meeting was adjourned at one O'clock.

SIGNED.....  
  
 PP (Chairperson)

DATE.....  
 22<sup>nd</sup> October 2015

10

11

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12

MINUTES OF THE 60<sup>TH</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON TUESDAY 25<sup>TH</sup> AUGUST, 2015 AT 9.00AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS.

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PRESENT

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Kathuri Murungi, M.P.
3. Hon. Sunjeev Kaur Birdi, M.P.
4. Hon. Abdinoor Mohammed Ali, M.P.
5. Hon. Wandayi James Opiyo, M.P.
6. Hon. Ole Kenta Richard Moitalel, M.P.
7. Hon. Farah Abdulaziz Ali, M.P.
8. Hon. Geni Charles Mong'are, M.P.
9. Hon. Barua Ejidius Njogu, M.P.
10. Hon. Muluvi Marcus Mutua, M.P.
11. Hon. Ndiritu Samuel Mathenge, M.P.
12. Hon. Dr. Wanyonyi Reginalda N. M.P.
13. Hon. Emanikor Joyce, M.P.
14. Hon. Ogalo George Oner, M.P.
15. Hon. Mwashetani Khatib, M.P.
16. Hon. Tonui Ronald Kiprotich, M.P.
17. Hon. Ganya Francis Chachu, M.P.
18. Hon. Mohamed Diriye Abdullahi, M.P.
19. Hon. Rop Jackson Kipkorir, M.P.

APOLOGIES

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Jude Njomo, M.P.
3. Hon. Dukicha Hassan Abdi, M.P.
4. Hon. Ng'ang'a Alice Wambui, M.P.
5. Hon. Gure Shukra Hussein, M.P.
6. Hon. Irea Gideon Mwiti, M.P.
7. Hon. Katana Aisha Jumwa, M.P.
8. Hon. Peter Kinyua, M.P.
9. Hon. Ottichilo Wilber Khasilwa, M.P.

IN-ATTENDANCE

THE SENATE

Sen. Agnes Zani, M.P

THE NATIONAL ASSEMBLY

1. Ms. ChebetKoskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III
3. Ms. Lynette Otieno - Legal Counsel II

MIN. NO. DC/ENR/264/2015 - PRELIMINARIES

The Chair called the meeting to order at 9.15 am followed by a word of prayer.

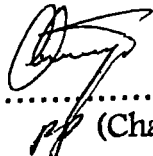
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MIN. NO. DC/ENR/265/2015 – MEETING WITH SEN. AGNES ZANI REGARDING THE PROPOSED NATURAL RESOURCES (BENEFIT SHARING) BILL, 2015

Senator Agnes Zani took the Members through the Bill, clause by clause. The Committee thereafter deliberated on the Bill and resolved to reject it because some of the provisions on resource sharing are in conflict with Bills already passed by the House and currently before Senate such as the Mining Bill. The Bill does not meet the requirements of Article 261, further, it does not fully give effect to Article 71 of the Constitution.

MIN.NO. DC/ENR/266/2015 ADJOURNMENT

There being no other business the meeting was adjourned at Twelve O'clock.

SIGNED.....  
  
rf (Chairperson)

DATE..... 22<sup>nd</sup> Oct 2015 .....



MINUTES OF THE 59<sup>TH</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON THURSDAY AUGUST 20<sup>TH</sup>, 2015 AT 10.00 AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS

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PRESENT

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Alexander Kosgey, M.P. – Vice Chairperson
3. Hon. Jude Njomo, M.P.
4. Hon. Irea Gideon Mwiti, M.P.
5. Hon. Ottichilo Wilber Khasilwa, M.P.
6. Hon. Geni Charles Mong'are, M.P.
7. Hon. Sunjeev Kaur Birdi, M.P.
8. Hon. Muluvi Marcus Mutua, M.P.
9. Hon. Wandayi James Opiyo, M.P.
10. Hon. Emanikor Joyce, M.P.
11. Hon. Peter Kinyua, M.P.
12. Hon. Rop Jackson Kipkorir, M.P.
13. Hon. Ndiritu Samuel Mathenge, M.P.
14. Hon. Dr. Wanyonyi Reginalda N. M.P.
15. Hon. Ganya Francis Chachu, M.P.

APOLOGIES

1. Hon. Kathuri Murungi, M.P.
2. Hon. Tonui Ronald Kiprotich, M.P.
3. Hon. Ogalo George Oner, M.P.
4. Hon. Ole Kenta Richard Moitalel, M.P.
5. Hon. Gure Shukra Hussein, M.P.
6. Hon. Ng'ang'a Alice Wambui, M.P.
7. Hon. Mohamed Diriye Abdullahi, M.P.
8. Hon. Katana Aisha Jumwa, M.P.
9. Hon. Dukicha Hassan Abdi, M.P.
10. Hon. Farah, Abdulaziz Ali, M.P.
11. Hon. Abdinoor Mohammed Ali, M.P.
12. Hon. Barua Ejidius Njogu, M.P.
13. Hon. Mwashetani Khatib, M.P.

IN-ATTENDANCE

CHINA ROAD AND BRIDGE CORPORATION LTD (CRBC)

1. Prof. Jacob Kibwage – SGR Environment Consultant
2. Mr. Gitau Githuku – CRBC Liaison Officer

- |                       |   |
|-----------------------|---|
| 3. Prof. Albert Mumma | – Legal Advisor, CRBC                   |
| 4. Ibrahim M. Ndegwa  | – SGR Liaison Officer, Kwale County     |
| 5. Abida Buoro        | – SGR EHS Administrator                 |
| 6. Pei Yan            | – SGR, Ag. General Manager              |
| 7. Leon Lee           | – External Affairs & Compensation, CRBC |
| 8. Julius Li          | – SGR. Manager, CRBC                    |

### THE NATIONAL ASSEMBLY

- |                      |                           |
|----------------------|---------------------------|
| 1. Ms. Chebet Koskei | - Clerk Assistant II      |
| 2. Mr. Joshua Ondari | - Clerk Assistant III     |
| 3. Mr. Hassan Odhwa  | - Senior Research Officer |
| 4. Ms. Lynnet Otieno | - Legal Counsel           |

### MIN.NO. DC/ENR/258/2015 - PRELIMINARIES

- (i) The Chairperson called the meeting to order at 10.30 am after which prayers were said.
- (ii) The Chairperson introduced the Agenda of the day and informed the Members that West Kenya Sugar Company had requested for a rescheduling of the meeting to a later day.

### MIN. NO. DC/ENR/259/2015 – CONFIRMATION OF MINUTES

- (i) The Minutes of the 47<sup>th</sup> Sitting were confirmed as a true record of the proceeding after being proposed by Hon. Wilber Ottichillo, M.P and being seconded by Hon. Samuel Ndiritu, M.P
- (ii) The Minutes of the 48<sup>th</sup> Sitting were confirmed as a true record of the proceeding after being proposed by Hon. (Dr.) Reginalda Wanyonyi, M.P and being seconded by Hon. Jackson Rop, M.P.
- (iii) The Minutes of the 49<sup>th</sup> Sitting were confirmed as a true record of the proceeding after being proposed by Hon. Joyce Emanikor, M.P and being seconded by Hon. Marcus Muluji, M.P
- (iv) The Minutes of the 50<sup>th</sup> Sitting were confirmed as a true record of the proceeding after being proposed by Hon. Sunjeev Birdi, M.P and being seconded by Hon. Charles Geni, M.P.

### MIN. NO. DC/ENR/260/2015 – MATTERS ARISING

(i) Under Min. No. 212/2015

Hon. Joyce Emanikor, M.P pointed out that there was a problem with NEMA as they seemed to be implicated in so many wrongful environmental matters.

(ii) Under Min. No. 216/2015

- a) Hon. Wilber Ottichillo, M.P brought to the attention of the Committee the need to ensure that the recommendations captured in the poaching report were implemented. The Committee resolved to organize a workshop to engage and chart a way forward for KWS.
- b) The Committee also deliberated on the need to create media awareness of all Committee activities.

MIN.NO. DC/ENR/261/2015 - SUBMISSION BY THE CHINA ROAD AND BRIDGE CORPORATION (CRBC)

Prof. Jacob Kibwage, the EIA consultant for the sand harvesting project informed the Committee that:-

- (i) CRBC requires 800,000 m<sup>3</sup> which will be used as backfilling material for the reclamation works of the Port Reitz Railway Container Terminal. The sand harvesting project is estimated to take 6-8 months;
- (ii) CRBC has not started any sand harvesting at the area but KPA has been harvesting sand at the area for the last two years. KPA had signed an MOU with the Kwale County Government to undertake the sand harvesting but had failed to meet the conditions of MOU;
- (iii) Alternative materials such titanium waste and river-bed sand would be unsustainable and could lead to marine pollution as it entailed introducing foreign elements into the sea. Sea sand is the best material for the project due to the nature of its characteristics, as its small particle sizes ensures stability and this cannot be gotten from the alternative materials;
- (iv) CRBC is planning to undertake sand harvesting along a strip of 400 metres to 1 kilometre offshore Indian Ocean from Likoni through Waa to Tiwi shorelines, the same area and location at which Kenya Ports Authority with financing from the Government of Japan/ JICA is harvesting sand to construct the Terminal II for the port of Mombasa;
- (v) Wide and exhaustive stakeholder consultations were held with state agencies namely National Environment Management Authority (NEMA), Kenya Marine Authority (KMA), Kenya Wildlife Service (KWS), Kenya Navy, Kenya Marine and Fisheries Research Institute, the Kwale County Government Representatives, members of Kenya Association of Hotel Keepers and Caterers and fishermen;
- (vi) No sand harvesting would be done at the Diani Beach and other ecologically sensitive areas;
- (vii) The corporation was in the process of negotiating with the county government of Kwale on the mechanisms for compensating the fishermen who would be affected during the period of sand harvesting, the compensation would either be monetary or through employment by CRBC;and

(viii) In the EIA report CRBC had indicated mitigating measures on the sand harvesting.


**MIN.NO. DC/ENR/262/2015 - COMMITTEE OBSERVATIONS AND RESOLUTIONS**

- (i) The Committee was concerned that a full EIA should have been done given the sensitivity of the environment.
- (ii) The Committee resolved to invite Kenya Ports Authority to shed more light on the sand harvesting and its MOU with the Kwale County Government.

**MIN.NO. DC/ENR/263/2015 ADJOURNMENT**

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There being no other business the meeting was adjourned at Quarter past One O'clock.

SIGNED.....  
  
..... (Chairperson)

DATE.....  
22nd October 2015

MINUTES OF THE 58<sup>TH</sup> SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON THURSDAY 18<sup>TH</sup> AUGUST, 2015 AT 10.00AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS.

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PRESENT

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Kathuri Murungi, M.P.
3. Hon. Sunjeev Kaur Birdi, M.P.
4. Hon. Ottichilo Wilber Khasilwa, M.P.
5. Hon. Abdinoor Mohammed Ali, M.P.
6. Hon. Peter Kinyua, M.P.
7. Hon. Wandayi James Opiyo, M.P.
8. Hon. Ole Kenta Richard Moitalel, M.P.
9. Hon. Farah Abdulaziz Ali, M.P.
10. Hon. Geni Charles Mong'are, M.P.
11. Hon. Barua Ejidius Njogu, M.P.
12. Hon. Muluvi Marcus Mutua, M.P.
13. Hon. Ndiritu Samuel Mathenge, M.P.
14. Hon. Dr. Wanyonyi Reginalda N. M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Emanikor Joyce, M.P.
3. Hon. Ogalo George Oner, M.P.
4. Hon. Mwashetani Khatib, M.P.
5. Hon. Jude Njomo, M.P.
6. Hon. Dukicha Hassan Abdi, M.P.
7. Hon. Ng'ang'a Alice Wambui, M.P.
8. Hon. Tonui Ronald Kiprotich, M.P.
9. Hon. Gure Shukra Hussein, M.P.
10. Hon. Ganya Francis Chachu, M.P.
11. Hon. Irea Gideon Mwiti, M.P.
12. Hon. Mohamed Diriye Abdullahi, M.P.
13. Hon. Katana Aisha Jumwa, M.P.
14. Hon. Rop Jackson Kipkorir, M.P.

IN-ATTENDANCE

THE NATIONAL ASSEMBLY

1. Ms. Chebet Koskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III
3. Mr. Hassan Odhwa - Researcher Officer

4. Ms. Lynette Otieno - Legal Counsel II

**MIN. NO. DC/ENR/253/2015 - PRELIMINARIES**

The Chair called the meeting to order at 10.15 am followed by a word of prayer.

**MIN. NO. DC/ENR/254/2015 – CONSIDERATION OF THE PROPOSED NATURAL RESOURCES (BENEFIT SHARING) BILL, 2015**

The Committee considered and resolved to invite Sen. Agnes Zani for a meeting to take the Committee through the Bill.

**MIN. NO. DC/ENR/255/2015 – CONSIDERATION OF THE PROPOSED AMENDMENT TO THE DROUGHT MANAGEMENT BILL, 2014**

The Committee considered the proposed amendments to Clause 4 and Clause 8 and resolved to reject the amendments for the following reasons:-

- a) It's unrealistic to make it mandatory for the authority to establish offices in all counties since not all counties experience drought; and
- b) Disaster management is a function assigned to the National Government under the Fourth Schedule to the Constitution. Therefore there is no Constitutional justification for a representative of the Council of Governors in a national government body.


**MIN.NO. DC/ENR/256/2015 ANY OTHER BUSINESS**

The Committee resolved to undertake a report writing retreat in Mombasa from Thursday 27<sup>th</sup> to Sunday 30<sup>th</sup> August, 2015 if the scheduled trip to China does not materialise on the proposed dates of 22<sup>nd</sup> to 28<sup>th</sup> August, 2015.

**MIN.NO. DC/ENR/257/2015 ADJOURNMENT**

There being no other business the meeting was adjourned at Half past Twelve O'clock.

SIGNED.....

  
PP (Chairperson)

DATE.....

22<sup>nd</sup> October 2015

MINUTES OF THE 50TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON TUESDAY 14<sup>TH</sup> JULY, 2015 AT 2.30PM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS

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PRESENT

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Ottichilo Wilber Khasilwa, M.P.
3. Hon. Geni Charles Mong'are, M.P.
4. Hon. Kathuri Murungi, M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Muluvi Marcus Mutua, M.P.
7. Hon. Tonui Ronald Kiprotich, M.P.
8. Hon. Emanikor Joyce, M.P.
9. Hon. Ogalo George Oner, M.P.
10. Hon. Peter Kinyua, M.P.
11. Hon. Mwashetani Khatib, M.P.
12. Hon. Irea Gideon Mwitii, M.P.
13. Hon. Ng'ang'a Alice Wambui, M.P.
14. Hon. Jude Njomo, M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Ole Kenta Richard Moitalel, M.P.
3. Hon. Wandayi James Opiyo, M.P.
4. Hon. Abdinoor Mohammed Ali, M.P.
5. Hon. Barua Ejidius Njogu, M.P.
6. Hon. Gure Shukra Hussein, M.P.
7. Hon. Ndiritu Samuel Mathenge, M.P.
8. Hon. Rop Jackson Kipkorir, M.P.
9. Hon. Dr. Wanyonyi Reginalda N. M.P.
10. Hon. Farah Abdulaziz Ali, M.P.
11. Hon. Ganya Francis Chachu, M.P.
12. Hon. Mohamed Diriye Abdullahi, M.P.
13. Hon. Katana Aisha Jumwa, M.P.
14. Hon. Dukicha Hassan Abdi, M.P.

IN-ATTENDANCE

THE NATIONAL ASSEMBLY

1. Ms. Chebet Koskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III

### THE KENYA ASSOCIATION OF HOTEL KEEPERS AND CATERERS (KAHC)

1. Mr. Sam Ikwaye - Executive officer
2. Mr. Onesmus K. Macharia - Coast Registrar Assistant
3. Mr. Charles Kamau - Vice Chair Kwale Natural Resource Network

### MIN.NO. DC/ENR/223/2015 - PRELIMINARIES

The Chair called the meeting to order at 2.45 pm after which prayers were said followed by a round of introductions. The Chair introduced the Agenda of the day.

### MIN. NO. DC/ENR/224/2015 - SUBMISSION BY THE KENYA ASSOCIATION OF HOTELKEEPERS AND CATERERS

The members of the Kenya Association of Hotelkeepers and Caterers informed the Committee as follows, that:-

- (i) The Kenya Association of Hotelkeepers and Caterers have huge investments along the South Coast beaches including Hotels cottages and other tourism related business and employs over 4,000 people directly and 10,000 indirectly;
- (ii) The proposed harvesting of sand on Diani Beach in Kwale County poses untold threats to the environment and to the livelihoods of the residents and the country at large;
- (iii) The Environmental and Management Coordination Act (EMCA) 1999 requires that a project of such a magnitude should be subjected to a full EAI study report with the extensive stakeholders involvement;
- (iv) In this case the public was not involved in the preparation of this EAI report as should be the case;
- (v) The ongoing illegal dredging is causing destruction of the marine ecosystem by destroying sea grass, fish breeding sites, corals and turtle nesting sites. These have a direct impact on fish stocks, impacting on the live hoods of fishermen and damage the attractive value of diving sites;
- (vi) The dredger has been noted collecting sand within the Diani - Chale marine National Reserves even before the end of the thirty days' notice to submit comments to NEMA on the project report;
- (vii) The EAI report is not specific and does not adequately describe the effects of dredging to the environmental and socioeconomic wellbeing and does not address the standard terms of reference for ESIA/EIA studies;
- (viii) The proponent concede that the sediments dumped into the ocean are likely to be washed back to the South Coast beach by ocean currents,
- (ix) The proposed mitigation cited in the report is inadequate and unrealistic within the proposed project period i.e. the proponent having proposed to



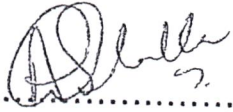
- compensate fishermen up to Kshs. 3 million within six months. This is not practical considering the process of compensation against proposed project time;
- (x) The aquatic and biotic lives are not recorded. They need to be recorded so that the existing numbers can be known; and
  - (xi) The report states that sand is to be harvested twenty four hours a day but the regulations states that harvesting was to be done as from 6am to 6pm.

MIN.NO. DC/ENR/225/2015 COMMITTEE RESOLUTION

The Committee resolved to invite China Road and bridge Construction Company for a meeting on 23<sup>rd</sup> July, 2015 to answer to the concerns raised.

MIN.NO. DC/ENR/226/2015 ADJOURNMENT

There being no other business the meeting was adjourned at quarter to Four O'clock.

SIGNED.....  
(Chairperson)

DATE..... 20/8/2015 .....

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MINUTES OF THE 49TH SITTING OF THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES HELD ON TUESDAY 14<sup>TH</sup> JULY, 2015 AT 10.00AM C.P.A ROOM, MAIN PARLIAMENT BUILDINGS

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PRESENT

1. Hon. Abdalla Amina, M.P. – Chairperson
2. Hon. Ottichilo Wilber Khasilwa, M.P.- Chair of the Session
3. Hon. Geni Charles Mong'are, M.P.
4. Hon. Kathuri Murungi, M.P.
5. Hon. Sunjeev Kaur Birdi, M.P.
6. Hon. Muluvi Marcus Mutua, M.P.
7. Hon. Tonui Ronald Kiprotich, M.P.
8. Hon. Emanikor Joyce, M.P.
9. Hon. Ogalo George Oner, M.P.
10. Hon. Peter Kinyua, M.P.
11. Hon. Mwashetani Khatib, M.P.
12. Hon. Irea Gideon Mwititi, M.P.

APOLOGIES

1. Hon. Alexander Kosgey, M.P. – Vice Chairperson
2. Hon. Ole Kenta Richard Moitalel, M.P.
3. Hon. Wandayi James Opiyo, M.P.
4. Hon. Abdinoor Mohammed Ali, M.P.
5. Hon. Barua Ejidius Njogu, M.P.
6. Hon. Gure Shukra Hussein, M.P.
7. Hon. Ndiritu Samuel Mathenge, M.P.
8. Hon. Rop Jackson Kipkorir, M.P.
9. Hon. Dr. Wanyonyi Reginalda N. M.P.
10. Hon. Farah Abdulaziz Ali, M.P.
11. Hon. Ganya Francis Chachu, M.P.
12. Hon. Ng'ang'a Alice Wambui, M.P.
13. Hon. Mohamed Diriye Abdullahi, M.P.
14. Hon. Katana Aisha Jumwa, M.P.
15. Hon. Dukicha Hassan Abdi, M.P.
16. Hon. Jude Njomo, M.P.

IN-ATTENDANCE

THE NATIONAL ASSEMBLY

1. Ms. Chebet Koskei - Clerk Assistant II
2. Mr. Joshua Ondari - Clerk Assistant III

**THE NAIROBI CITY COUNTY ASSEMBLY SECTORAL COMMITTEE ON WATER AND SANITATION**

- |                                |  |
|--------------------------------|--|
| 1. Hon. Peter Wanyoike Gitau   | - Member, Sectoral Committee on Water and Sanitation |
| 2. Hon. David Njoroge Kairu    | -Member  |
| 3. Hon. Pius OwinOtieno        | -Member  |
| 4. Hon. Kenneth Thugi Muriuki  | -Member  |
| 5. Hon. Celestine Ongere Owino | - Member   |
| 6. Hon. Hawa Dafala            | - Member   |
| 7. Hon. Michael Ogada          | - Member   |
| 8. Hon. Caroline Muga          | - Member   |
| 9. Hon. Victoria Alali         | - Member   |
| 10.Hon. Alex Otieno            | - Member   |
| 11.Mr. Austin Inyundele        | - Clerk, Sectoral Committee on Water and Sanitation  |

**MIN.NO. DC/ENR/219/2015 - PRELIMINARIES**

The Chair called the meeting to order at 10.30 am after which prayers were said. The Chair introduced the Agenda of the day and asked the visiting delegation to introduce themselves followed by introductions by the Members of the Committee.

**MIN. NO. DC/ENR/220/2015 – MEETING WITH THE NAIROBI CITY COUNTY ASSEMBLY SECTORAL COMMITTEE ON WATER AND SANITATION**

- a) The Chair informed the County Assembly Committee that under the Water Bill, 2014 all the Water Resources were held in trust by the Government,. The National Government also has the responsibility for regulation of the water sector and consumer protection. The Counties on the other hand had the function of water distribution and sanitation. Water tariffs are set by the National Government in consultation with the Counties.
- b) The County Assembly Committee was further informed that the National Assembly had already passed the Water Bill, 2014 and the Bill was now in the Senate. The County Assembly Committee was advised to have a sitting with the Senate Committee on Land and Natural Resources to bring to their attention the issues they felt needed to be addressed in the Water Bill, 2014.
- c) On Water access by poor people, the delegation was also informed that an institution, the Water Trust Fund, had been created to fund investors who wanted to supply water to such areas but had limited financial capacity.

- d) On the Water Policy, the Chair informed the County Assembly Committee that the Water Policy was currently being prepared so that it could be presented to the Committee for consideration.
- e) The County Assembly Committee was concerned that the Athi Water Services Board was performing some of the Functions of the Counties.

Committee Resolution

- (i) The Committee advised the County Assembly Committee to forward a Memorandum regarding the Problems it was facing with Athi Water Services Board so that the Committee could take it up.
- (ii) There was need to have a workshop with stakeholders after the Water Bill, 2014 was passed so as to bring all stakeholders together in understanding the implementation of the law.

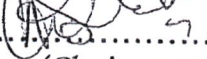
MIN.NO. DC/ENR/221/2015 ANY OTHER BUSINESS

The Chair informed the Members that the Ministry of Environment had invited the Committee for a breakfast Meeting Regarding E-waste Management which would be held at the Intercontinental Hotel from 7.00-10.00 am. The following Members confirmed their attendance:-

- 1. Hon. Amina Abdalla, M.P - Chairperson
- 2. Hon. Kathuri Murungi, M.P
- 3. Hon. Joyce Emanikor, M.P
- 4. Hon. Sunjeev Birdi, M.P

MIN.NO. DC/ENR/222/2015 ADJOURNMENT

There being no other business the meeting was adjourned at quarter to Twelve O'clock.

SIGNED.....  
  
 (Chairperson)

DATE.....  
 28/8/2015

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## APPENDEX TWO

### SUBMISSIONS.

I) NEMA

II) KENYA MARITIME AUTHORITY

III) KENYA MARITIME AND FISHARIES  
INSTITUTE

IV) KENYA ASSOCIATION OF HOTEL KEEPERS  
AND CATERERS

V) CHINA ROAD AND BRIDGE  
CORPORATION

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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/1581

Application Reference No: NEMA/EIA/PSR/3580

This is to certify that the Environmental Impact Assessment Project Report received from  
China Road and Bridge Corporation.

P.O Box 18251- 00500, Nairobi.

submitted to the National Environmental Management Authority in accordance with the  
Environmental Impact Assessment & Audit Regulations regarding  
Proposed Offshore Sea and Sand Harvesting.

whose objective is to carry on

Harvesting of about 800,000 cubic metres of sand at an estimated depth of between  
19-50 metres in a strip of 0.4 - 1.0 Km offshore in the Indian Ocean.

located at

0.4 - 1.0 Km offshore in the Indian Ocean from Likoni through Waa to Tiwi areas in the  
South Coast, Kwale County.

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

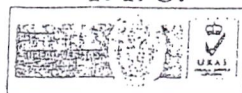
Issue date : 22 May, 2015

Signature

(seal)

Director-General  
The National Environment  
Management Authority.

P. T. O.



ISO 9001 : 2008 Certified

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1.0 General Conditions

- 1.1 This project is for the harvesting of about 800,000 M<sup>3</sup> of sand at an estimated depth of between 19-50 metres in a strip of 0.4-1.0 km offshore in the Indian Ocean from along Tiwi to Waa area in Kwale County at an estimated cost of Ksh. 35,000,000 for the construction of the Port Reitz Cargo Terminal of the Mombasa-Nairobi Standard Gauge Railway project.
- 1.2 The license shall be valid for 24 months (time within which the project shall commence) from the date thereof.
- 1.3 The Director General shall be notified of any transfer, variation or surrender of the 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 submit 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. Sand-Harvesting Conditions

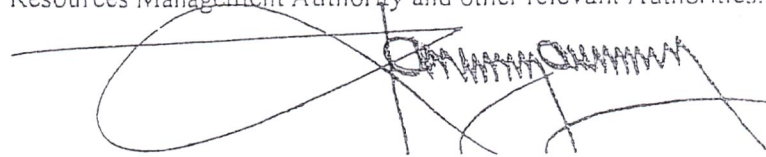
- 2.1 The proponent shall obtain the requisite approvals from the County Government of Kwale, the Kenya Maritime Authority and all other relevant Authorities prior to commencement of works.
- 2.2 The proponent shall ensure that the sand-harvesting works are confined to the area between Tiwi-Likoni. NO sand-harvesting shall be permitted in the Diani area to prevent possible impacts to tourism activities within that area.
- 2.3 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.
- 2.4 The proponent shall ensure that rare, threatened and endangered species are identified and carefully relocated prior to commencement of works.



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- 2.5 The proponent shall ensure that the sand-harvesting works do not interfere with marine parks, natural monuments, tourist areas, sea grass habitats and other ecologically sensitive sites.
- 2.6 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 mechanisms (GRM) as shall be prescribed in the Resettlement Action Plan (RAP).
- 2.7 Pursuant to condition No. 2.6 above, the proponent shall in consultation with the County Government of Kwale, the Kenya Maritime Authority, the Kenya Marine and Fisheries Institute, the Kenya Ports Authority and the Beach Management Units; compensate the fishermen around the project area for loss of livelihoods occasioned by the sand harvesting activities.
- 2.8 The proponent shall ensure that all excavated material and debris is collected, reused and where need be, disposed off as per the Environmental Management Coordination Management (Waste Management) Regulation 2006.
- 2.9 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.
- 2.10 The proponent shall ensure that all drainage facilities are fitted with adequate functional oil water separators and silt traps.
- 2.11 The proponent shall ensure strict adherence to the provisions of the Environmental Management and Coordination (Noise and Excessive Vibrations Pollution Control) Regulations of 2009.
- 2.12 The proponent shall ensure strict adherence to the Occupational Safety and Health Act (OSHA), 2007.
- 2.13 The proponent shall ensure that construction workers are provided with adequate personal protection equipment (PPE), sanitary facilities as well as adequate training.
- 2.14 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.
- 2.15 The proponent shall ensure that dredging is conducted in consideration of seasonal variations and wind pattern changes to limit the extent of propagation of sediments during dredging and dumping.
- 2.16 The proponent shall in liaison with the Kenya Wildlife Service, Kenya Marine and Fisheries Institute, Kenya Ports Authority, Kenya Maritime Authority and other research monitor the project activities to ensure the integrity of the affected environment is maintained.
- 2.17 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 Kwale, Ministry of Transport and Infrastructure, Kenya Ports Authority, Kenya Maritime Authority, Kenya Marine and Fisheries Institute, Ministry of Health, Kenya Railways Corporation, National Construction Authority, Kenya Wildlife Service, Directorate of Occupational Health and Safety Services, Water Resources Management Authority and other relevant Authorities.



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2.18 The proponent shall ensure that environmental protection facilities or measures to prevent pollution and ecological deterioration such as:

- a) Measures to prevent oil spillage by the dredging equipment.
- b) Use of appropriate sand harvesting equipment to minimize physical impacts such as agitation of the sea-bed material.
- c) Arrangements to conduct sediment quality analysis.
- d) Measures to protect and preserve fish breeding areas.
- e) Measures to avoid tourist areas, protected areas, sensitive environments, national monuments and other sites of archaeological importance.
- f) Sound environmental monitoring and reporting mechanisms;

Are constructed and employed simultaneously with the proposed project.

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

### 3. Notification Conditions

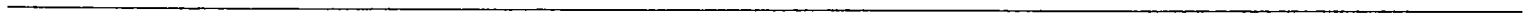
- 3.1 The proponent shall seek written approval from the Authority for any operational changes under this license.
- 3.2 The proponent shall ensure that the Authority is notified of any malfunction of any system within 12 hours on the NEMA hotline No. 020 6006041 and mitigation measures put in place.
- 3.3 The proponent shall keep records of all pollution incidences and notify the Authority within 24 hours.
- 3.4 The proponent shall notify the Authority of its intent to decommission three months in advance in writing.

### 4. Decommissioning Conditions

- 4.1 The proponent shall ensure that a decommissioning plan is submitted to the Authority for approval at least three (3) months prior to decommissioning.
- 4.2 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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**nema**  
mazingira yetu | juhai wetu | wajibu wetu

# NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY

Tel: (254-020)-6005522 / 3 / 6 / 7, 6001945, 6008767  
 Mobile line: 0724 253 398, 0723 363 010, 0735 013 046, 0735 010 237  
 Telkom Wireless: 020-2101370  
 Fax: (254-020)-6008997  
 Hotline: 020-8077233, 020-6006041

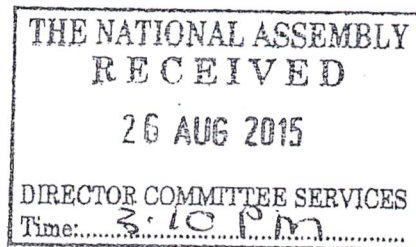
P. O. Box 67839 - 00200  
 Popo Road, Nairobi, Kenya  
 E-mail: dgnema@nema.go.ke  
 website: www.nema.go.ke

**Ref: NEMA/5/2/Vol. XXVII**

**25<sup>th</sup> August 2015**

**Ms. Florence Atenyo-Abonyo**

Director, Committee Services  
 National Assembly  
 Parliament Buildings  
 P.O. Box 41842-00100  
**NAIROBI**



Dear Madam,

**SUBMISSION OF INFORMATION TO THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES REGARDING SAND HARVESTING AT THE DIANI BEACH**

Reference is made to your letter NA/DC/ENR/41/2015 dated 20<sup>th</sup> August 2015 on the above subject matter.

Attached please find a response to the issues raised for the purpose of the Committee's sitting scheduled for **Thursday, 27<sup>th</sup> August, 2015.**

Yours sincerely,

**DR. AYUB MACHARIA**  
**FOR: DIRECTOR GENERAL**

*FMEJEN*  
*pls deaf*

*FA*  
*26/8*

CC Principal Secretary  
 Ministry of Environment and Natural Resource  
 NHIF Building  
**NAIROBI**



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**FIELD COMMENTS FOR THE ENVIRONMENTAL IMPACT ASSESMENT  
PROJECT REPORT FOR THE PROPOSED OFF SHORE SAND HARVESTING  
FROM LIKONI TO NORTH OF TIWI**

**INTRODUCTION**

During the review of the above mentioned report emphasis were put on critical aspects of EIA process which include, description of the project location, Public participation and stakeholders engagement, review of legal frame work relevant to the project, identification of Negative impacts and proposed Mitigation measures. Therefore the report will highlight the same and comment on them appropriately.

**2.0 DESCRIPTION OF THE PROJECT LOCATION**

The report indicates that the proposed off shore sand harvesting will be undertaken in a strip 0.4 - 1.0 km offshore Indian Ocean from Likoni through Waa to Tiwi areas in the South Coast, Kwale County. The area is correctly identified as longitudes and latitudes:

- Point 1. 4°7' 8.71" S, 39°40' 17.33" E,
- Point 2. 4°7' 21.43" S, 39°40' 42.96" E,
- Point 3. 4°14' 52.41" S, 39°36' 27.63" E,
- Point 4. 4°14' 52.75" S, 39°36' 58.04" E

**3.0 PUBLIC PARTICIPATION AND STAKEHOLDERS ENGAGEMENT**

The report contained comments from key stakeholders including Kenya Wildlife Service (KWS), Kenya Marine and Fisheries Institute (KEMFRI), Kenya Maritime Authority, Department of fisheries Kwale County, Kenya Ports Authority (KPA), South Coast Residents Association and registered beach management units (BMU's). Each group raised concerns relevant to their docketts and or livelihoods. The report meets the Constitutional requirement under Article 69 and EIA procedure on Public consultation and participation.



#### 4.0 RELEVANT LEGAL FRAME WORK

The expert reviewed relevant national legislations, regulations and guidelines as well as international conventions, protocols and agreements as well as Regional Agreements relevant to the proposed project.

The national legal framework reviewed included the Constitution of Kenya, Environmental Management and Co-ordination Act (EMCA), The Environmental (Impact Assessment and Audit) Regulations, 2005, Water Quality Regulations, Waste Management Regulations, Controlled Substances Regulations, 2007 (Legal Notice No.73 of 2007), The National Oceans and Fisheries Policy (2008), The Regional Development Authorities Policy (2007), The ICZM Policy, The ICZM Action Plan (2010-2014), The Environmental Management and Coordination Act (Conservation Of Biodiversity Diversity and Resources, Access To Genetic Resources And Benefit Sharing) Regulations, 2006, Air Quality Regulations, 2008, Noise and Excessive Vibration Pollution Control Regulations, 2009, Wetlands, River Banks, Lake Shores and Sea Shore Management Regulation, 2009, Prevention of pollution in coastal Zone and other segments of the environment) regulation, 2003, The Kenya Maritime Authority Act (2006), The Fisheries (Beach Management Unit) Regulations (2006), The Marine Zones Act No. 6 of 1989, The Coast Development Authority Act, The Fisheries Act Cap 378, The Wildlife (Management and Conservation) Act, The Occupational Safety and Health Act, 2007, Public Health Act 1986 Revision, The Water Act, 2002, Land Act No. 6 288 of 2012, Employment Act No 11 of 2007, Labour Institutions Act No. 12 of 2007, Traffic Act Cap 403, Penal Code Cap 63

The International conventions and protocols and agreements reviewed included: United Nations Convention on the Law of the Sea (UNCLOS), Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972), Convention on Biological Diversity, 1992 ("CBD Convention"), The UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) is also an important global programme, The 2002

World Summit on Sustainable Development (WSSD) and Johannesburg Plan of Implementation (JPOI), The UNEPs' Regional Seas Programme.

The Regional Agreements include: The Nairobi Convention, The African Union's 2050 Africa's Integrated Maritime (AIM) Strategy, Regional Economic Integration Agreements (REIAs), Regional Economic Integration Agreements (REIAs), International Maritime Conventions, Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter.

#### 5.0 NEGATIVE IMPACTS AND MITIGATIONS

The report properly identified probable environmental and social impacts of the project drawing much from and capturing concerns raised by the stakeholders and relevant government lead agencies during the consultative meetings.

The critical concerns raised by the stakeholders and lead agencies and articulated in the report broadly include:

- i) Interference with the sand beaches (particularly in Diani Beach) thereby affecting tourism, the economic lifeline of Kwale County.
- ii) Interference with commercial fisheries particularly at Waa and Tiwi areas, thereby affecting the livelihoods of the fisher folks and by extension the entire Waa and Tiwi community. Other fishermen from Mwakamba BMU, Mwaepe BMU, Chalejeza BMU who also operate within the Tiwi and Waa area will also be affected.
- iii) Interference with Parks, National and Historical Monuments, National Seashores, Research Sites, and similar Preserves.
- iv) Smothering of corals and sea grass beds/ benthic organisms, fluxes of sediment bound contaminant.
- v) Modification of marine ecosystems.

## 6.0 MITIGATION MEASURES

The report suggested the following measures to mitigate the negative impacts:

i) There will be no sand harvesting in Diani area. The plan to harvest sand along Diani area was shelved and an alternative site identified after numerous consultations.

ii) Mitigation for interference with commercial fisheries and livelihoods of fishing communities include:

- Compensation for fishermen in relation to loss of commercial fish catch should be considered.

~~Fishermen should be empowered to access alternative fishing grounds~~

- Fishermen will also be encouraged to explore alternative sources of livelihood during the operation phase of the project.

iii) Mitigation for interference with Parks, National and Historical Monuments, National Seashores, Research Sites, and similar Preserves involves avoiding such areas. No sand harvesting will be done near such areas.

iv) Mitigation measures against smothering of corals will be based on the fact that the coral reefs and sea grass beds located north of the dumping site will not suffer significantly due to progressive reduction in sediment load as the turbidity plume is transported northward by the East African coastal current.

## 7.0 CONCLUSION AND RECOMMENDATION

In conclusion, the report correctly captured the project area. Public consultation and stakeholders' involvement met constitutional threshold. Legislative frameworks well reviewed and their relevance to the project properly articulated. Potential environmental and social impacts properly identified and concerns of the public and Government lead agencies are captured. The proposed mitigation measures are quite adequate apart from the measures to control smothering of corals which should be made clearer and actionable.

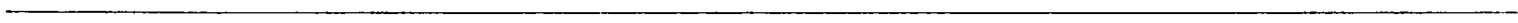
I recommend that the project may be licensed with the following mandatory conditions:

- i) Written commitment from the proponent to compensate the fishermen from Waa, Tiwi, Mwakamba BMU, Mwaepe BMU, Chalejeza BMU before the project commences.
- ii) No sand harvesting should be carried out near marine protected areas. A safer distance from the boundary of all protected marine areas is recommended as KWS may recommend.
- iii) Commitment to comply with all other conditions issued by other relevant Government departments in their individual comments sent to NEMA.
- iv) Regular and strict monitoring schedule executed by a multidisciplinary team of all relevant government agencies to ensure that the critical conditions/concerns raised are not flouted as the activities continues.



OYOO GEORGE PETER  
COUNTY DIRECTOR OF ENVIRONMENT  
KWALE COUNTY

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# NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY

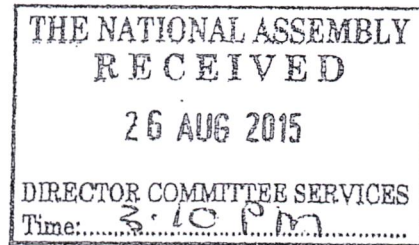
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Ref: NEMA/5/2/Vol. XXVII

25<sup>th</sup> August 2015

**Ms. Florence Atenyo-Abonyo**  
 Director, Committee Services  
 National Assembly  
 Parliament Buildings  
 P.O. Box 41842-00100  
**NAIROBI**



Dear Madam,

**SUBMISSION OF INFORMATION TO THE DEPARTMENTAL COMMITTEE ON ENVIRONMENT AND NATURAL RESOURCES REGARDING SAND HARVESTING AT THE DIANI BEACH**

Reference is made to your letter NA/DC/ENR/41/2015 dated 20<sup>th</sup> August 2015 on the above subject matter.

Attached please find a response to the issues raised for the purpose of the Committee's sitting scheduled for **Thursday, 27<sup>th</sup> August, 2015.**

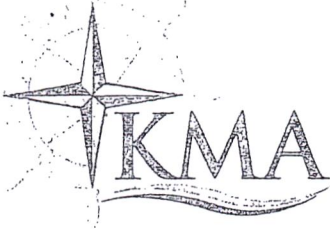
Yours sincerely,

**DR. AYUB MACHARIA**  
**FOR: DIRECTOR GENERAL**

*EMEREN*  
*pls deaf*  
*FA*  
*26/8*

CC Principal Secretary  
 Ministry of Environment and Natural Resource  
 NHIF Building  
**NAIROBI**

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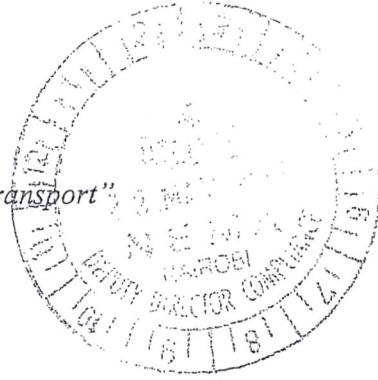


"For safe and efficient water transport"

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KMA/SS/5/1/06

25<sup>th</sup> May, 2015

Director General  
National Environmental Management Authority,  
Popo Road, South C, off Mombasa Road  
P.O. BOX 67839-00200,  
NAIROBI

Dear Sir,

*Wanyo*  
*Not a comment*  
*also advise if*  
*any improvement*  
*may be necessary*  
*2/6/15*

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROJECT REPORT REVIEW**

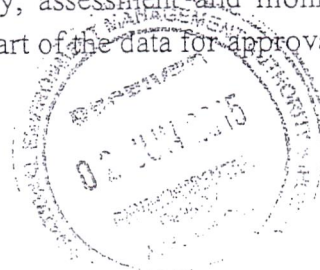
This is to acknowledge the receipt of two Environmental and Social Impact Assessment project report for the proposed offshore sea sand harvesting from off Likoni to North of Tiwi in South coast of the Indian Ocean for construction of the Port Reitz cargo terminal of the Mombasa – Nairobi standard gauge railway project NEMA ref: NEMA/PR/512/13,463 and Environmental and Social Impact Assessment project report for the proposed dumping of excavated beach material (mud, soil and few hard shells) into the Indian Ocean for the Mombasa –Nairobi standard gauge railway project ref: NEMA/PR/512/13, 463.

Kenya Maritime Authority has reviewed the project reports and the following comments are hereby submitted to the National Environmental Management Authority (NEMA) for their necessary action;

**General comments;**

As you are aware, a series of consultative meetings between key stakeholders and China Road and Bridge Corporation (CRBC) representatives culminated in a joint inspection of the proposed site on 21<sup>st</sup> January, 2015.

The parties agreed that the dumpsite which was being used during the construction of berth No. 19 A temporary permit with conditions was issued for two months from 24<sup>th</sup> January, 2015 to 23<sup>rd</sup> March, 2015 for dumping the excavated sea materials (mud, soil and few hard shells). The purpose of this temporary permit was to allow for study, assessment and monitoring of the impacts of the dumping activities so that it can also form part of the data for approval.



It should be noted that after the temporary license was issued the proponent did not fulfill the requirements as specified in the temporary permit.

Following a complaint in the Daily Nation dated Friday May 8, 2015 by the County Government of Kwale titled "Stop the needless destruction of Diani Beach, it belongs to all Kenyans" it is evident that public participation for the proposed activities was not adequately conducted. It is imperative that the proponent should obtain a clearance letter from the County Government of Kwale to proceed with the proposed activities.

The report does not identify the specific life forms found at the proposed dredging and the dumping site nor does it state the estimated expected magnitude of the damage to be visited on the ecosystem of the region. Furthermore, it would be prudent to do a specific assessment of all commercial activities at the proposed site, such as fishing, so that an estimation of the magnitude of effects can be done.

The report clearly identifies expected positive and negative impacts emanating from the project's activities. However, the negative impacts are of primary concern due to the potential for pollution of the ocean and damage of marine ecosystems. Moreover, some of the impacts are generally stated and it would be appropriate to localize them to the actual sites of the proposed project.

The report states that the dumping site has already been used for dumping in a previous project; in that case the proponent should have evaluated and clearly identified the impacts so far from the previous activities to form a baseline for the proposed activities.

**It is worth noting that, despite the proposed projects being of different nature and proposed to take place in different sites; there is need to clarify why the identified impacts are the same for both proposed projects. The reference numbers of the two reports are NEMA/PR/5/2/13,462 and NEMA/PR/5/2/13,463.**

#### **Comments on stated impacts**

- **Increased noise;** the report cites the absence of bowhead whales and other mammals at the proposed site but acknowledges the presence of other cetaceans such as harbor porpoises. An assessment of the actual impacts of noise on these cetaceans and fishes on the site would have been ideal.
- **Occupational Safety and Hazards;** The proposed safety plans and coordination mechanisms between the proponent, KPA and KFS to ensure a smooth flow of traffic and to reduce the likelihood of collisions need to be drafted and availed early enough.
- **Nutrients and chemical release;** the proponent has stated that they will engage the services of NEMA certified laboratory to conduct tests on soil mud and any other materials that may be extracted. The proponent should give a timeline for this activity and results be availed to the relevant authorities.

- **Impact on Fish and other sight feeders;** while the proponent stated that these effects are expected to be short-lived, an assessment of the outcome in the duration of operation will be necessary.
- **Effects of removing marine aggregates;** the proponent does not satisfactorily address how the impact of extraction tracks left by the dredging hopper will be mitigated. The proponent states that the area where removal of mud, soil and a few hard shells will later be filled with marine sand should also put into consideration the shoreline erosion that has been witnessed along the coastal line.
- **Disruption of fishing activities during dumping;** the risk of partial or permanent loss of major fishing grounds translates to loss of livelihoods, food security and national income. Those affected should be identified and a compensation plan should be put in place to compensate the victims.
- **Reduced water depth;** as stated the water depth at the site where mud will be dumped will reduce; the proponent should establish the new depth after all the dumping has been done for future decision making.
- **Increased deposition of mud in coastal beaches;** this will have significant effect on the beaches leading to reduced touristic and recreational value of sandy beaches in the area. The proponent has not suggested the mitigation measures against such effects.
- **Smothering of corals and sea grass beds/benthic organisms;** will put additional pressure to the already stressed coral reefs due to climate change and therefore the proponent should provide clear mitigation measures to minimize the impacts.
- **Fluxes of sediment bound contaminants;** Heavy metal concentrations monitoring at the dumping site should be incorporated in the management plan as the dredging site is expected to have high levels of contaminants in the view of past pollution events.
- **Modification of marine ecosystems;** Routine biological monitoring as proposed by the proponent should be undertaken during and after the project and results should be availed to the relevant authorities.

## **Conclusion**

The report has identified most of the major issues emanating from the proposed project activities, as well as suggested appropriate mitigation measures to reduce the impacts of the negative effects arising from the project activities. Nonetheless, the generality of some of the identified impacts should not be overlooked and therefore there is need for localizing the impacts to reflect the proposed site.

The report has also considered alternatives for the proposal. The 'No Project Option' seems not to be feasible. The 'Proposed Development Option' is viable as long as all the socio-economic and environmental mitigation measures and concerns raised by different stakeholders are addressed. The 'Relocation Option' to the explosives dumping site is not feasible as it is disused.

and already decommissioned. The 'Beneficial Use Option' would be ideal however; it is not currently practiced in Kenya and not regulated by law.

The Environmental Management Plan (EMP), which provides a logical framework within which the identified negative social and environmental impacts can be mitigated and monitored, would help reduce the impacts if adhered to the latter.

All the vessels that will be used in these activities must meet the minimum safety requirements as stipulated by the law.

### **Recommendations**

- ~~There is need for specifying the impacts of the two projects independently. They cannot be exactly the same!~~
- There is need to specify the proposed actions to be implemented by the proponent in case of major changes in sediment load and turbidity levels.
- There is need for a specific assessment of the water-borne noise levels and their effects on any marine life in the affected areas. Whatever has been presented is too general.
- The expected soil testing needs to be done prior to the project commencing the findings, indicating what toxins are in the sediments and their expected effects on the biota should be presented to the relevant authorities on time.
- There is need to clarify what specific animal species and habitats are going to be affected in the areas of operation. Also indicate whether there are any endangered species in these areas.
- There is need to identify the number of fishermen that will be affected by the proposed activities. Additionally, there is need for specific plans on how the proponent, will compensate the fishermen for lost livelihoods.
- The proponent needs to establish the impacts of the previous sand harvesting works and dumping towards the construction of berth 19 to inform the expected impacts of the proposed activities.
- There is need for a comprehensive plan clearly showing how the proponent will involve the lead agencies such KEMFRI, KMA, CFA, KFS, KPA, Coast Water Services Board, Coast Development Authority, NEMA towards implementation and monitoring of the mitigation measures that have been proposed.

### **Specific comments;**

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROJECT REPORT FOR THE PROPOSED OFFSHORE SEA SAND HARVESTING FROM OFF LIKONI TO NORTH OF TIWI IN SOUTH COAST OF THE INDIAN OCEAN FOR CONSTRUCTION OF THE PORT REITZ CARGO TERMINAL OF THE MOMBASA – NAIROBI STANDARD GAUGE RAILWAY PROJECT NEMA REF: NEMA REF: NEMA/PR/5/2/13,462**

The proponent shall undertake the proposed activities in the designated areas at all times.

Filtered water shall be released at the bottom of the water column to minimize the impacts of re-suspended contaminants and nutrients.

Increased turbidity will interfere with marine productivity due to low light penetration; the proponent shall therefore take necessary action against major changes in sediment load and turbidity.

The proponent shall identify and map all ecologically sensitive areas and submit the maps to NEMA and KMA for approval. The Proponent shall also maintain a minimum distance of 4.5 km from all ecologically sensitive areas in identifying the project area.

The proponent shall not undertake the proposed activities in or close to designated marine protected areas in this case the Diani Chale Marine Park and Reserve and other protected areas.

Increased vessel traffic will disrupt other marine activities and tourism activities and therefore the proponent shall put in place measures to reduce the impacts and where necessary the proponent shall compensate those affected.

Noise generated from the dredger can cause changes in the behavior of marine mammals and other marine life resulting into migration or death; the proponent shall therefore put appropriate measures to reduce noise levels such as using appropriate technology, fitting with silencers, undertaking the proposed activities during low seasons among others where necessary.

The proponent shall employ marine mammals' observers during the dredging activities paying special attention to foraging, spawning and aggregation, and in case any key species are observed, then the exercise shall be stopped immediately.

The proponent shall ensure all the scheduled activities are conducted during the low season e.g tourism and fishing to minimize the impacts the project will have during the peak season.

The proponent shall take utmost precaution and care shall be taken in protecting the critical habitats and sites of importance to local communities, user groups (fishers, tour operators and tourists) and appropriate remedial actions taken to address emerging issues both during and after the dredging exercise.

The proponent shall undertake environmental assessments of critical habitats (corals, seagrass beds and mangrove areas) for purposes of monitoring changes in biological communities, which may be affected by project works.

The proponent shall put in place measures to minimize the risk of oil spill leakages and accidents and all vessels undertaking the proposed activities shall maintain a working shipboard oil spill response contingency plan.

The proponent shall develop marine traffic management plan with relevant key organizations to ensure that risk of accidents and collisions are minimized.

The proponent shall take into consideration spawning and migratory seasons and other biologically critical periods before undertaking the proposed activities.

**ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROJECT REPORT FOR THE PROPOSED DUMPING OF EXCAVATED BEACH MATERIAL (MUD, SOIL AND FEW HARD SHELLS) INTO THE INDIAN OCEAN FOR THE MOMBASA –NAIROBI STANDARD GAUGE RAILWAY PROJECT NEMA REF: NEMA/PR/5/2/13, 463**

Dumping will only be confined to the designated area at all times

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The dredge spoil dumping site shall be located 4km away from any nearest sensitive marine habitats and should be at least to a depth of 200meters

Dumping shall not be done in or close to a Marine Park or Reserve, and similar preserves which are regarded as protected areas.

Increased turbidity of water column as a result of release of sediments during offshore dumping will have negative impacts on the water quality and therefore the proponent shall develop a water quality monitoring protocol to track the impacts of dumping on a daily basis.

The proponent shall develop an actionable environmental management plan that takes into account the various lead agencies for example KWS, KMFRI, KMA, NEMA, KPA, Kwale County Government, BMU'S and the members of the public to address concerns emanating from the proposed activities.

The proponent shall provide a schedule of the proposed activities to the relevant lead agencies every month to minimize the disruption of other marine activities and tourism activities.

The proponent shall work closely and in coordination with the Kenya Ports Authority (KPA) and Kenya Ferry Services (KFS) to ensure smooth flow of vessel traffic and reduction in probability of collisions and accidents.

The proponent shall engage the services of certified laboratory to conduct tests on soil mud and any other materials that may be extracted from the proposed dredging site to ensure that the excavated debris will not pose harm to the marine environment at the dumping site.

The proponent shall undertake environmental assessments of critical habitats (corals, seagrass beds and mangrove areas) for purposes of monitoring changes in biological communities, which may be affected by project works.



The proponent shall take immediate action stop any further dumping if monitoring reveals contamination of the marine ecosystem and reported immediately to authorities concerned.

The proponent shall ensure that wastes from the vessels are not thrown overboard during the operations.

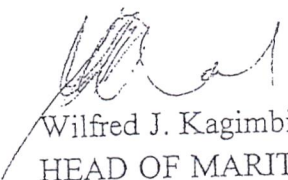
The dredge spoil shall be released at the sea bottom and during calm sea conditions to avoid significant impacts on biological sensitive ecosystems.

After the dumping the proponent shall undertake to establish the new depths of the dumping site as a result of accretion.

Should the project receive a licence from NEMA the following conditions MUST be met by the proponent while undertaking the proposed activities;

- i. Furnish KMA with records of the nature and quantity of the excavated sea material being dumped, the location, time and the method being used.
- ii. Submit to KMA daily impact and mitigation monitoring reports including water quality assessment reports.
- iii. Provide weekly dredging and dumping tracks and plots to KMA while ensuring the Automatic Identification System (AIS) is switched on at all times.
- iv. Ensure that safety of navigation requirements during the whole exercise are adhered to.
- v. Provide a monthly work programme to KMA.
- vi. Provide vessel particulars of all the vessels used in the project and their crew lists to KMA.
- vii. Any security, safety or pollution incidents in the project with respect to dredging, sand harvesting and reclamation works should be immediately notified to KMA.

Yours faithfully,

  
Wilfred J. Kagimbi

HEAD OF MARITIME SAFETY DEPARTMENT  
FOR: DIRECTOR GENERAL

