

MURANGA COUNTY ASSEMBLY

THIRD ASSEMBLY- FIRST SESSION



MURANG'A COUNTY ASSEMBLY  
CLERK  
15 FEB 2021  
.....  
FORWARDED TO THE  
HON. SPEAKER FOR APPROVAL

REPORT ON STATUS OF SOLID WASTE MANAGEMENT IN THE COUNTY

Clerk's Chambers

Murang'a County Assembly

## Table of Contents

1.0 Preface.....	3
1.1 Committee Mandate .....	3
1.2 Committee membership .....	3
1.3 Acknowledgements .....	4
2.0 BACKGROUND .....	5
3.0 SOLID WASTE MANAGEMENT .....	5
3.1 Waste Generation and Collection .....	5
3.2 Waste Collection Centers and Transportation .....	5
3.3 Disposal Sites.....	6
3.4 Proposed Mitubiri Sanitary Landfill.....	6
3.4.1 The following projects were enjoined to the development of the proposed Mitumbiri Sanitary Landfill.....	7
3.4.2 Role of the County Government in the Mitumbiri Landfill .....	7
3.4.3 The management of the landfill upon completion .....	8
3.4.4 The county assembly adopted the following recommendations with regards to the sanitary landfill;.....	8
4.0 OBSERVATIONS: .....	9
5.0 RECOMMENDATIONS:.....	9
6.0 REPORT ADOPTION .....	11

## **1.0 Preface**

Hon. Speaker, Committees of this Assembly are a creation of Section 14(1a) of the County Government Act 2012, which empowers the Assembly to make Standing Orders (SO) for the orderly conduct of the Assembly proceedings, including the operations and proceedings of its Committees.

The Sectoral Committee on Energy, Environment, Forestry and Natural Resources is established pursuant to the second schedule of the County Assembly of Murang'a Standing Orders.

## **1.1 Committee Mandate**

The Sectoral Committee on Energy, Environment, Forestry and Natural Resources is mandated to consider all matters related to implementation of specific National Government Policies on Natural Resources and Environmental Conservation, including Water catchment and riparian areas, energy production and regulation, soil and water conservation, preservation of forests, control of air pollution, noise pollution, other public nuisances and outdoor advertising; Refuse removal, refuse dumps and both solid and liquid waste management;

## **1.2 Committee membership**

The Committee comprises of the following members: -

1. Hon. Dinah Muthoni Kagiri	Chairperson
2. Hon. Gladys Wambui Waikau	Vice Chairperson
3. Hon. Margaret Wanjiku Gichia	Member
4. Hon. John Kamwaga Mwangi	Member
5. Hon. Esther Nyawira Kamindo	Member
6. Hon. Samson Mukora Ngigi	Member
7. Hon. Hannah Wairimu Kamau	Member
8. Hon. Edwin Mwangi Wairagu	Member
9. Hon. Naomi Nyambura Maina	Member
10. Hon. Gathee Wanjeri	Member
11. Hon. Alex Wanyoike Wainaina	Member
12. Hon. John Munyua	Member

### 1.3 Acknowledgements

- a) The Committee wishes to sincerely thank the Offices of the Speaker and the Clerk of the County Assembly for the support extended to it in the execution of its mandate.
- b) The Chairperson of the Committee takes this opportunity to thank all the members for their profound contribution through dedication of time and efforts towards the realization of the mandates of the Committee.
- c) The Committee wishes to record its appreciation for services rendered by the staff of the County Assembly attached to the Committee. Their efforts and input made the work of the Committee and production of this Report possible.

On behalf of The Sectoral Committee on The Energy, Environment, Forestry and Natural Resources, it is my pleasure and duty to present to this honorable House, the Committee's report on status of solid waste management in the County.

Thank you.

Signed.....

Hon. Dinah Muthoni Kagiri  
(Chairperson)

Committee on Energy, Environment, Forestry and Natural Resources

Dated this.....day of .....2022

## **2.0 BACKGROUND.**

Solid waste management within the County has faced serious challenges. There is high population growth and urbanization in various towns within the county which has led to increased solid waste production. Solid waste is disposed of through open dumping in estates which has directly resulted to proliferation of diseases, stagnation of economic development, impact on the quality of life and environmental degradation.

The Department on Environment and Climate Change is tasked with the provision of the solid waste management services across the County. This regular and routine service is critical in Municipalities, Towns, Market Centers, Trading Centers and shopping centers.

This report endeavors to highlight the current state of solid waste management, the challenges and the existing opportunities in the County.

## **3.0 SOLID WASTE MANAGEMENT**

Solid Waste Management (SWM) refers to the activities designed to effectively collect, transport, treat and dispose of waste due to public health concerns, aesthetics, natural resource conservation and other environmental considerations.

In the County it covers garbage collection from both residential and commercial centers, transportation of the garbage from the collection centers/refuse chambers/garbage point to the dumpsites and overall management of dumpsites.

As at 2018, Murang'a County had 412 market places that together with households and other institutions produce solid waste of approximately 325 tons/day. The population is expected to have increased and as a result increased waste produced. The County should thus adopt the best strategies of disposing the solid waste.

### **3.1 Waste Generation and Collection**

Waste is mostly generated at household, market places, cities, towns, institutions and industrial zones. The types of waste generated can be categorized as general domestic waste, garden refuse, biomedical, building rubbles, paper and plastic waste.

The department has previously supplied plastic garbage bins to enhance garbage collection at the point of origin. The bins have however not been adequate to serve the entire population.

The department has not been able to achieve garbage segregation at the source due to lack of infrastructure and public awareness. The Department is however trying to build the capacity to segregate at the source.

### **3.2 Waste Collection Centers and Transportation**

This are holding areas for waste before it is transported to the dumpsites. They are supposed to be strategically established to serve a certain area. They should have waste collection

facilities such as skips, bulk containers and waste cubicles which are regularly emptied. The department has constructed 40 centers across the County.

Waste transportation in the county is done using open trucks which causes littering along the way. The trucks are not adequate to serve the entire county and thus low frequency of collection of waste from the garbage points. In return the waste exceeds the centers causing mini dumpsites in towns and market places.

### **3.3 Disposal Sites**

Waste generated is disposed of in open dumpsites across the county except for biomedical waste which is largely disposed through incineration and rudimentary kilns.

There are designated dumpsites across the Sub-Counties and the Municipality. The department manages these dumpsites through compacting, heaping, aggregating and orderly disposal.

Lack of perimeter walls, proper road networks inside the sites, inaccessibility in wet seasons, the dumpsites experience disorderly disposal by the truckers, scavenging eyesore stench, bot flies, clogging smokes from fires among other related problems.

Proper segregation needs to be done at the dumpsite to facilitate re-use, recycling and composting. The department should explore means and ways to achieve the basic segregation at the dumpsites.

### **3.4 Proposed Mitubiri Sanitary Landfill**

The World Bank jointly with the Ministry of Transport, Infrastructure, Housing and Urban Development through Nairobi Metropolitan Services Improvement Project did a pilot study on how best solid waste can be disposed. They found sanitary landfill to be the best and modern way and thus decided to put up a similar facility in Mitumbiri, Murang'a County.

The project is located in Gikono Vilage, Ward, Maragwa Subcounty, Murang'a County. The site is 67 Km from Nairobi, 12 Km from Kabati Town and lies in a 50 acres piece of Land. The landfill is designed to have two ceels with expected operational life of 10 years.

The following activities were conducted to ensure that the County Government was involved in decision making on thge development of the sanitary landfill;

1. Members of the County Assembly were invited to a consultative forum at Utalii Hotel-Nairobi that was aimed at educating and informing them about the project and gathering their inputs on the same.
2. Members of the County Assembly were invited to a study tour to Muriet Landfill in Arusha, Tanzania that was aimed at getting first-hand information regarding existence, operation, management and effects of an operational landfill.

3. Members of the County Assembly conducted a study tour to eThekweni Municipality, South Africa in a fully operational landfill
4. The County Executive Department took a study visit to Scotland on development and operation of a sanitary landfill.
5. The County Assembly and Executive have had numerous visits to the landfill site at Gikono.

#### **3.4.1 The following projects were enjoined to the development of the proposed Mitumbiri Sanitary Landfill**

1. Construction of the access road to mitumbiri landfill
2. Construction of the River Nginye Bridge
3. Construction of a proposed market in the area
4. Expansion of the dispensary center and improve its accessibility
5. Form a Solid Waste Management Authority, to enhance regulations and legislations by November, 2018
6. Sinking of two boreholes for Gikono residents
7. Decommissioning and restoration of all existing dumpsites in the County
8. Procurement of two modern garbage transportation vehicles for the county

#### **3.4.2 Role of the County Government in the Mitumbiri Landfill**

Ensure a sound MOU is signed between the NAMSIP and the County Government which should include the following:

1. A committal exit strategy after completion
2. A management plan
3. Provide an efficient waste collection and transport system
4. Establish a buffer zone in the 250 metre radius and plant trees
5. Ensure that leachates are discharged into secure retention ponds before being transferred to a nearby sewage facility for treatment and release
6. Ensure eligible Murang'a youths go through an intensive technical training and occupational therapy and health as they work in the project
7. Establish a health facility as a CSR for the community in addition to the roads
8. Ensure working hours are between 8-5 pm to avoid noise nuisance
9. Ensure daily soil cover is done after delivery of the waste
10. Ensure all flammable materials are stored in a well-ventilated house.
11. Ensure the open areas are re-vegetated and drainage systems maintained
12. Ensure all the construction debris is disposed of as per the waste management regulations 2006

### 3.4.3 The management of the landfill upon completion

Upon completion of construction of the landfill, the Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works and the World Bank will engage a solid waste specialist for a year or two to help guide the operational phase of the project. This will serve as part of capacity building for the local staff from the County Government.

For post construction phase, the County of Murang'a will eventually have a decision on whether to mandate their local staff to run the operations of the landfill or to contract a private company with experience on land operations to manage the facility. This then will require legislation for it to be anchored in law

### 3.4.4 The county assembly adopted the following recommendations with regards to the sanitary landfill;

1. That Nairobi Metropolitan Services Improvement Project (NaMSIP) should **proceed and implement** the Mitubiri sanitary landfill and incorporate the following recommendations:
  - ✓ An agreement on corporate social responsibility (CSR) be drawn and signed between the County Government and the Ministry of Transport, Infrastructure, Housing, urban Development and Public Works.
  - ✓ The size of the buffer zone be increased to reduce health risk to the surrounding community.
  - ✓ Vegetation be planted in the existing buffer zone to cushion the surrounding community which is 250 meters from the site from the effects of landfilling.
2. The landfill management in partnership with relevant stakeholders should develop elaborate plans and policies for management of waste not accepted in the landfill as guided by the applicable County and National legislations. In view of this, construction of the sanitary landfill in the County **should incorporate a sorting facility and a recycling plant** for plastic and other hazardous materials.
3. That the construction of the sanitary landfill should incorporate **closures of existing dumpsite and transfer stations** in every sub-county to minimise cost of waste transportation.
4. That Solid Waste Management including collection in the County should be carried out by Community Based Organizations (CBO) through the management of the County Government. These entities should preferably comprise of women & youth groups and persons living with disability as part of their job creation and empowerment.
5. That the County Government should conduct a financial analysis tariff study to determine the percentage of revenue collected monthly that should be remitted to the County Government.



6. That the County Government should increase the budgetary allocation to Environment and Climate Change department to cater for Solid Waste Management.
7. The County Executive Committee Member for Environment and Climate Change should come up with policy paper and legislation to govern the landfill. The department should further train their technical staff on operations and safety before the completion of construction for a successful take over.
8. All the proposed mitigation measures in the Environmental, Social and Impact Assessment (ESIA) report should be implemented to ensure sustainability of the project throughout its lifecycle as well as the environmental sustainability of the project area.
9. That an efficient and proactive management of the grievance redress system to be established during construction and operational phases of the project.
10. There should be a clear and elaborate decommissioning plan for the sanitary landfill prior to commencement of operations.

#### **4.0 OBSERVATIONS:**

The committee made the following observations;

1. That implementation of solid waste management in the county is facing a lot of challenges due to lack of infrastructure including garbage bins and garbage disposal trucks among others.
2. That there is no proper documentation on the waste generated and disposal sites within the County.
3. That construction of Mitumbiri Sanitary Landfill is which is 80% completed has halted, the discussion on handing over to the County Government is still not concluded.
4. That the County Government in its partnership and engagement of stakeholders, it has not involved any community-based organization and private garbage collectors.
5. That there are no laws and regulations guiding solid waste management in the County

#### **5.0 RECOMMENDATIONS:**

That the CEC Environment and Climate Change should undertake the following;

1. Conduct a fact-finding study research within the county and provide a detailed documentation on the following:
  - ✓ The quantity of waste generated in tonnes per day
  - ✓ The sources and types of waste generated
  - ✓ The current waste disposal practices
  - ✓ The number of official dumpsite and their location within the County
  - ✓ The status of waste management infrastructure including the number of garbage bins, collection centres, trucks, safety equipment's and employees.
  - ✓ The frequency of waste collection from the collection points

2. Register and licence all private garbage collection service providers.
3. Ensure that partnership with the private garbage collection service providers is done in the entire county. The County should also consider Community Based Organizations (CBO) preferably targeting women & youth groups and persons living with disability as part of their job creation and empowerment.
4. Formulate a policy paper and legislation to guide the private garbage collection service providers
5. Conduct public awareness campaign on solid waste management
6. Provide comprehensive information on the status of Proposed Mitumbiri Sanitary Landfill

The County assembly should facilitate members to;

1. Conduct a fact finding visit to the dumpsites within the County
2. Conduct a fact finding visit to the proposed sanitary landfill site.
3. Conduct a meeting with the Nairobi Metropolitan Services Improvement Project to discuss on sanitary landfill.

**6.0 REPORT ADOPTION**

1. Hon. Dinah Muthoni Kagiri

  
.....

2. Hon. Gladys Wambui Waikau

  
.....

3. Hon. Margaret Wanjiku Gichia

  
.....

4. Hon. John Kamwaga Mwangi

  
.....

5. Hon. Esther Nyawira Kamindo

.....

6. Hon. Samson Mukora Ngigi

  
.....

7. Hon. Hannah Wairimu Kamau

  
.....

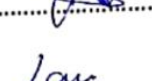
8. Hon. Edwin Mwangi Wairagu

  
.....

9. Hon. Naomi Nyambura Maina

  
.....

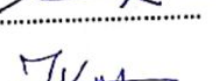
10. Hon. Gatheo Wanjari

  
.....

11. Hon. Alex Wanyoike Wainaina

  
.....

12. Hon. John Munyua

  
.....