



COUNTY GOVERNMENT OF BUSIA
DEPARTMENT OF LANDS, HOUSING
& URBAN DEVELOPMENT

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Municipality of Busia
Solid Waste Management Policy

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FOREWORD

Through the department of Lands, Housing and Urban Development, the Municipality of Busia has set out to develop this functional policy to address the myriad of challenges in the solid waste management. This policy will provide a framework to address solid waste problem in Busia Municipality in line with service provision for solid waste management, sanitation and health status, collection and transportation, reduction and recycling of solid waste for sustainable development anchored on the SDGs.

Whereas the policy affirms the municipality commitment to intensify campaign against improper disposal of solid waste onto the environment and ensure a harmonized waste management it also commits our constitutional mandate for safe, compliant, environmentally and financially sustainable solid waste management. It further provides direction on the management of various aspects of waste management while defining the responsibilities of created institutional arrangements.

Moreover, through this policy, key integrated solid waste management strategies have been adopted. They will include: adoption of legislation for packaging waste, controls on hazardous waste, and investments in handling solid wastes, Combat climate change effects, Develop an auditing system of existing waste infrastructure and local capability, Develop clean-up standards and remediation methods ,encourage best practice for waste management and resource recovery systems. Waste minimization, Ensure secured and fenced designated site(s) for waste disposal among other strategies.

In collaboration with other stakeholders, the municipality will sustain the provision of adequate quality services in waste management. Lastly, this policy recommends a legal and institutional framework that supports an integrated approach to improve the solid waste management.

Hon. Plan. Prof. Grephas P. Opata
**County Executive Committee Member for Lands, Housing and Urban
Development**
The County Government of Busia

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Not to forget the Municipal Board for their support and the special team from Municipality of Busia management that spent endless time to make this document a reality.

Mr. Kenneth Nabulindo
Municipal Manager.
Municipality of Busia.

ACRONYMS

CBD	Central Business
CBOs	District Community Based Organizations
CSOs	Civil Society Organizations
EIA	Environmental Impact Assessment
EMCA	Environment Management and Co-ordination Act 1999, Cap 387
ISWM	Integrated Solid Waste Management
KIE	Kenya industrial estates
KUSP	Kenya Urban Support Programme
NEMA	National Environment Management Authority
NGOs	Non-Governmental Organization
PPP	Public Private Partnership
SMEs	Small Scale Enterprises
ISWM	Integrated Solid Waste Management

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DEFINITIONS OF TERMINOLOGIES

Biodegradable material: Any organic material that can be broken down by microorganisms into simpler, more stable compounds. Most organic wastes (e.g., food, paper) are biodegradable.

Biomedical waste: Biomedical waste also referred to as medical waste refers to waste generated in health facilities, or during immunization of human beings. It is classified into; Infectious waste, sharps, pharmaceutical wastes, chemical waste and pathological waste. Biomedical wastes pose risks to human health due to its pathogenic characteristics and hence require prior treatment before disposal. Although the biomedical waste is expected to be disposed through incineration, some find its way to the municipal dumpsites while some are handled through rudimentary facilities such as kilns, the major challenge remains the illegal disposal of these wastes.

Bulky waste: Large wastes such as appliances (white goods), furniture, and trees and branches that cannot be handled by normal MSW processing methods.

Collection: The movement of wastes from residences, businesses, or a collection point, to a vehicle, for transport to a processing, transfer, or disposal site.

Commingled: Mixed post-consumer items that are collected together as municipal solid waste.

Compost: A soil conditioner also called humus and may be used as a fertilizer.

Composting: Biological decomposition of solid organic materials by bacteria, fungi, and other organisms into a soil-like product.

Construction and demolition debris: Waste generated by construction and demolition of buildings, such as bricks, concrete, drywall, lumber, miscellaneous metal parts and sheets, packaging materials, etc.

Construction and demolition waste: This is waste that is generated as a result of new construction works, remodeling or demolition. Construction waste comprises debris, steel, timber, iron sheets, tiles and ceramics among others. Although construction and demolition waste is not classified as hazardous, it is a mixed waste source that requires separation into component parts for the purposes of recycling. These wastes may end up in the disposal sites or are used for backfilling in our road networks. Demolition wastes may include asbestos, which is hazardous and can present a significant health risk when improperly disposed or reused. Currently, disposal of asbestos is a nationwide challenge.

Disposal: The final handling of solid waste, usually in a landfill, following collection, processing, or incineration.

Diversión: The re-direction of post-consumer items away from final disposal for reuse, composting or recycling.

Diverted material: Anything that is no longer required for its original purpose and, but for commercial or other waste minimization activities, would be disposed of or discarded.

Domestic waste: Domestic waste is also referred to as garbage, refuse, or trash. It consists mainly of biodegradable waste, which is food, and kitchen waste, green waste paper and non-biodegradable such as plastics, glass bottles, cans, metals, and wrapping materials. The composition of the domestic waste streams is a function of income, consumption patterns, and recycling opportunities. In Busia County, domestic waste is not adequately managed and is disposed-off at our disposal sites with minimal sorting/segregation.

Electronic waste (e-waste): E-waste is an emerging waste stream arising from Electrical and Electronic Equipments (EEEs) becoming obsolete at the end of life e-waste comprises of heavy metal components and materials used in the manufacture of electronic goods. Some of these include mercury, brominated

flame-retardants, and cadmium that are considered hazardous if not well handled during dismantling or recycling can become harmful to human health and the environment. Currently there is no proper mechanism for handling e-wastes in Busia County.

Fluorescent lamps: Fluorescent lamps are used for illumination and contain a small amount of mercury. The mercury is a neurotoxin and can be harmful even in small quantities. Fluorescent lamps can be successfully recycled and the mercury recovered. However, if poorly handled at any stage this releases the mercury, which is hazardous. Increasingly people are adopting florescent lamps as energy saving devices across the country, which is likely to compound the challenge of their disposal.

Hazardous waste: Materials that are flammable, explosive, oxidizing, corrosive, toxic, eco-toxic, radioactive or infectious. Examples include unused agricultural chemicals, solvents and cleaning fluids, medical waste, and many industrial wastes.

Industrial waste: Industrial waste is the waste produced by industrial activity, which includes any material that is rendered useless during a manufacturing process. Industries produce both hazardous and non-hazardous waste. These wastes include chemical solvents, wastewater, paints, sand paper, and paper products, industrial by products, metals, municipal solid waste, and radioactive waste. Currently, most of the hazardous industrial waste is not pretreated before reuse, recycling or disposal. This poses health risks to the handlers and causing damage to the environment. Disposal of hazardous industrial waste illegally occurs at the municipal dumpsites.

Pesticide waste: Pesticides are chemicals used to control pests. Pesticide waste consists of expired and contaminated pesticides as well as the used containers. Due to their toxicity, potential to pollute and threat to human health, pesticide wastes are extremely hazardous and must be transported, treated and

disposed-off accordingly. At the moment, there are no proper measures put in place by the county government to help manage these wastes.

Pesticide waste: Pesticides are chemicals used to control pests. Pesticide waste consists of expired and contaminated pesticides as well as the used containers. Due to their toxicity, potential to pollute and threat to human health, pesticide wastes are extremely hazardous and must be transported, treated and disposed-off accordingly. These pesticides can contain Persistent Organic Pollutants (POPs), which can accumulate in the food chain if not well managed.

Special bulk wastes – These waste categories refer to some appliances (white goods), tyres, derelict vehicles, construction and demolition wastes etc. that require special handling before it is disposed. While not considered a hazardous waste, improper handling can result in hazardous substances being released into the environment.

Used oil and sludge: Used Oil and Sludge arises from the use of petroleum products. This contains potentially hazardous compounds such as poly-aromatic hydrocarbons that have carcinogenic and mutagenic properties. Used oil and sludge have a slow rate of decomposition and hence any spillage can accumulate in the environment causing soil and water pollution. Used oil is largely applied in the treatment of timber and dust suppression, which ends up being pollutant on our waters.

Waste management: A generic term given to the whole spectrum of activities associated with waste, namely, its generation, collection, segregation, storage, handling, and transportation from point of source (ward/ department/ market/ residential areas) to final place of disposal (recycling/ landfill/ incinerator).

CHAPTER 1: INTRODUCTION

1.1 Introduction

By provisions in the Constitution of Kenya (2010), every person is entitled to a clean and healthy environment and has a duty to safeguard and enhance the environment. However, the generation of wastes continues to confront man in his living environment. This is as a result of anthropogenic activities which generate waste, especially under conditions of rapid urbanization. The common waste being solid waste, that potent severe impact on the environment, thus threatening quality of life. Unfortunately, the rise in solid wastes generation has not necessarily been followed by an increase in the capacity to effectively manage the emerging challenges.

In waste management, the principals of inter- and intra-generational equity, the polluter-pays principle and the precautionary principle prevail. By this policy it would be possible to address waste management issues in the context of the Environment Management and Co-ordination Act 1999. The latter provides for a comprehensive framework for the development of an Action Plan at any level. Provisos of the policy should entail classification, segregation, collection, temporary storage, handling, transportation, treatment, disposal, and governance of wastes in Busia County. Retrospectively, this policy is not fixated to the components stated in it and is therefore open to review and updates to fit in the prevailing environmental dynamics.

1.2 Historical Development

Busia Town is the gateway to Uganda and Central Africa. The town was established as a market centre in the 1930s by the Elgon Nyanza District African Council and later grew as a town and an important border crossing point to Uganda.

In 1963, Busia Town became the District Headquarters of the Busia District. It was later elevated to the status Urban Council in 1979. It was upgraded to Town Council status in 1982 and to a Municipal Council in 1990 covering an area of 44

Km². The Municipal Council is found in Busia and Teso Districts after Teso District was carved from the larger Busia in 1995.

1.3 Municipality of Busia legal status

Busia Municipality is established as per the Urban Areas and Cities Act of 2011 (amended 2019). It qualified to be a municipality not only because it's the Headquarters of Busia County, but also met the threshold set for conferment of Charter and Municipal status to legible urban centres.

1.4 Location and Size of Municipality of Busia

Busia Municipality is one of the Municipalities in Kenya and is located within Busia County, along the Kisumu-Busia Road at the Kenya-Uganda Border. The Municipality, which is the administrative capital of Busia County, is about 550Km West of Nairobi, 124Km Northwest of Kisumu and 130Km Southeast of Kakamega. It borders Uganda on the West, Matayos Division to the East and South and Teso South Sub-county to the North.

The Municipality covers an area 44Km² divided into two (2) county electoral units – Burumba and Angorom it covers two Divisions of Township in Busia Sub-county and Chakol in Teso Sub-county in Busia County. It has two Locations - Township location has two sub locations (Central Mjini and Mayenje) and Angorom location has three sub locations (Alupe, Agoloto and Amerikwai. The coordinates of Busia, Kenya are: 00°27'48.0"N, 34°06'19.0"E (Latitude:0.463333; Longitude:34.105278). Busia, Kenya sits at an average elevation of 1,227 metres (4,026 ft), above sea level.

1.5 Topography and Geology

The Municipality is characterized by deep dissected topography drained by several rivers. The Municipality's geology and basement system comprises of volcanic rocks of the Pleistocene age and Achaean rock type respectively. The rugged, dissected topography and geology is both an asset and liability to the Municipality. The volcanic rocks hence fertile soils result in thriving agricultural activities. The dissected topography causes gulley erosion and landslides raising the cost and maintenance of service infrastructure within the Municipality.

1.6 Demographic Structure and Trends

As per the 2009 KNBS census, the Municipality population was 61,825 (29,983 males and 31,842 females). With the average growth rate of 0.4%, this population is projected to be 82,625 (40,070 males and 42,555 females) in 2020. This population is further projected to hit 96,249 (42,513 males and 53,736 females) in the year 2025 which is the end of the plan period. The demographics also indicate that the number of households increased with 0.4% and recorded an average of 4 persons per household translating to a density of 413 persons per sq. km.

	POPULATION 2009			PROJECTION 2019		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
MJINI	12,835	13,658	26,493	17,153	18,253	35,406
MAYENJE	4,448	4,722	9,170	5,944	6,311	12,255
AGOLOTO	6,186	6,309	12,495	8,267	8,432	16,699
AMERIKWAI	3,592	4,031	7,623	4,800	5,387	10,188
ALUPE	2,922	3,122	6,044	3,905	4,172	8,077
GRAND TOTAL						82,625

Source: Kenya National Bureau of Statistics (2009 census)

The projected increase will lead to increased waste generation and complexity of the waste streams.

1.7 The Context and Essence of The Policy

This policy is designed for the sustainable management of solid waste in the Municipality. It is founded on the spirit of the Constitution of Kenya 2010, the National Vision 2030, the principles laid out in the EMCA 1999, and the National Waste Management Policy. This policy, is so developed to comply with Schedule 4 of the Constitution of Kenya 2010 with regard to the mandate of devolved functions, defines the pathways for county legislations in the water sector, while keeping in tandem with the National Solid Waste Management Act, 2019.

CHAPTER 3: SITUATIONAL ANALYSIS

The municipality is experiencing rapid growth in population with several informal settlement dwellers and the middle class. This status has led to an increase in waste generation and complexity of the waste streams.

Over the years waste management was the preserve of the local government authorities. Other than meager resources being allocated for solid waste management, there is general lack of personnel with requisite technical capability for the improved waste management practices. As a result, the current poor state of waste management has prevailed translating into indiscriminate dumping, uncollected waste and lack of waste segregation across the country.

It's due to the above that, that is, administrative and technical considerations leading to the development of this policy.

3.1 Waste streams

Waste produced within the municipality can be categorized as domestic, municipal, industrial and hazardous wastes; in addition to e-waste, waste/used oil, waste tyres.

Among the types of wastes found in the county are: Domestic Waste, Biomedical Waste, Used Oil and Sludge, E-Waste, Pesticide Waste, Fluorescent Lamps, Construction and demolition waste.

3.2 Environmental Problems of Poor Waste Management

The poor state of solid waste management has caused the following environmental problems:

3.2.1 Surface water contamination:

Waste from commercial and residential areas end up in water bodies negatively changing the chemical composition of the water. Technically, this is called

water pollution, and it affects wetlands and other riparian ecosystems. It also causes harm to animals that drink from such polluted water sources.

3.2.2 Soil contamination:

Hazardous chemicals that get into the soil (contaminants) can harm plants when they are taken-up through their roots. If humans eat affected plants and animals that have consumed such plants as pasture, then there is a high possibility of occurrence of negative impacts on human health.

3.2.3 Pollution

Bad waste management practices in the county have resulted in land and air pollution which can cause respiratory problems and other adverse health effects to humans as contaminants, are inhaled and absorbed into the lungs proceeding to other parts of body.

3.2.4 Leachate

The liquid that forms water trickles through contaminated areas is called leachate. It forms a harmful mixture of chemicals that may result in hazardous substances entering surface water, groundwater or soil. Such a scenario is common in most small urban centers in Busia County.

3.2.5 Municipal wellbeing

Most trading centers in the county have poor sanitation, smelly and with waste matter all over the place, an indication of poor living standards in urbanized areas of the county.

3.2.6 Recycling revenue

Busia County does not invest in recycling and proper waste control thus missing out on revenue from recycling, green job opportunities that come from recycling, and potential for establishment of organic fertilizer ventures and even a factory.

3.3 Waste Management Practices

3.3.1 Waste segregation:

Most generated wastes originate at the household level, market places, towns, institutions, and industrial zones. No proper waste segregation practices are in place, perhaps due to lack of enforcement of existing regulations. To this end, the county experiences poor handling of biomedical wastes originating from the health facilities, which often find way to dumpsites. This is not only dangerous but also some of the recoverable materials such as plastic bottles, metals, and paper products are lost in the dumps.

3.3.2 Collection and Transportation:

Waste in the market centre is largely collected by the County Government. Its transportation is currently done by open non-specialist trucks. NEMA has already pointed out the inappropriateness of this method of transportation. To this end the county government is seek purchase of dedicated vehicles for the movement of wastes.

3.3.3 Waste treatment:

Waste treatment technologies have not been embraced in the county. However there are ongoing efforts to enhance uptake of such technologies. Recyclable materials comprise 50–70% of the general waste stream in the county, meaning there is potential for establishment of small industries that may use recyclable items as raw material. The need for waste segregation is paramount.

3.3.4 Waste disposal:

Most of the municipal and domestic waste generated is disposed-off in open non-dedicated dumpsites across the county. The county does not have official and adequate waste disposal sites leading to unscrupulous workers who without authority, end up dumping wastes along the roadsides and backyards. To some degree, biomedical waste is disposed through burners and kilns, which unfortunately are not efficient incinerators. The County lacks such facilities. Indeed the requirements stipulated in the Third schedule of the Waste Management Regulations of 2006 are rarely complied with.

3.3.5 Sewer disposal:

The municipality does not have a sewerage network with an associated treatment plant. The use of septic tanks and soak pits is predominant at private homes and institutions. Sewerage exhauster services are not only inadequate but also lack a reliable and reticulated. This situation can result into illegal disposal of sewerage thus polluting the natural water resources in the county.

3.4 Creation of Awareness

Collaboration is required across various departments, the public and private sector for sufficient waste management. There is need to carry out preliminary waste awareness initiatives among individuals as well as the public and private institutions to improve on knowledge and skills on waste handling and how to minimize the associated risks. We shall enhance collaboration and partnership with local traders and investors and the government agencies to ensure that knowledge and skills are transferred and undertake training programs for trainers.

This waste management policy will address the above issue. It constitutes the first strategic response to the growing challenges of waste management in the municipality. In addition, the policy framework is a tool for all residents and businesses in the county.

3.5 Land Use and Physical Development Planning

Waste management is recognized as an integral part of land use and physical development planning. In this context the requirements by NEMA for EIA License for Environmental Clearance for any planned disposal and transfer station site selections is appropriate to ensuring sound environmental management.

3.6 The Process of Policy Development

This policy document was developed through exhaustive public and key stakeholder's participation for data gathering. This was through consultative workshops and public meetings it entailed use of technical staff from relevant department and other key stakeholders.

CHAPTER 4: POLICY FRAMEWORK, GOAL, OBJECTIVES AND GUIDING PRINCIPLES

4.1 Legal Framework relevant to Solid Waste Management in Kenya

In the Constitution of Kenya, Article 42 on the Environment provides that- —Every person has the right to a clean and healthy environment, which includes the right *‘To have the environment protected for the benefit of present and future generations through legislative and other measures, particularly those contemplated in Article 69; and*

To have obligations relating to the environment fulfilled. Under Article 69 on Obligations to the Environment, the Constitution provides that –

The State shall—

Encourage public participation in the management, protection and conservation of the environment;

Establish systems of environmental impact assessment, environmental audit and monitoring of the environment;

Eliminate processes and activities that are likely to endanger the environment; and

Utilise the environment and natural resources for the benefit of the people of Kenya.

- a) Every person has a duty to cooperate with State organs and other persons to protect and conserve the environment and ensure ecologically sustainable development and use of natural resources.

Part 2 of the fourth Schedule in the Constitution of Kenya also explicitly provides that the County Governments through relevant departments shall be responsible for;

- c) Refuse removal,
- d) Refuse dumps and
- e) Solid waste disposal.

The Environmental Management and Coordination Act (EMCA), 1999 Section 3 of EMCA, 1999 stipulates that —Every person in Kenya is entitled to a clean and

healthy environment and has a duty to safeguard and enhance the environment.

Section 87 of EMCA 1999 states that –

- a) No person shall discharge or dispose of any wastes, whether generated within or outside Kenya, in such manner as to cause pollution to the environment or ill health to any person.
- b) No person shall transport any waste other than –
 - in accordance with a valid licence to transport wastes issued by the Authority; and
 - to a wastes disposal site established in accordance with a license issued by the Authority.
- c) No person shall operate a wastes disposal site or plant without a licence issued by the Authority.
- d) Every person whose activities generate wastes shall employ measures essential to minimize wastes through treatment, reclamation and recycling.

Environmental Management and Coordination (Waste Management) Regulations of 2006 In the Responsibility of the Generator, Regulation 2 states that :

Any person whose activities generate waste shall collect, segregate and dispose or cause to be disposed of such waste in the manner provided for under these Regulations.¶

Regulation 5 on the Segregation of waste by a generator states that:

Any person, whose activities generate waste, shall segregate such waste by separating hazardous waste from nonhazardous waste and shall dispose of such wastes in such facility as is provided for by the relevant Local Authority.

4.2 Goal

The goal of this policy framework is to:

- a) Achieve solid waste management by conserving public health and the environment, drive job and wealth creation.
- b) Implement integrated waste management through waste minimization, harnessing waste as a resource

4.3 Objectives

The objectives of this Policy are to:

- a) Establish and maintain an effective and efficient framework to mainstream solid waste management measures and actions across relevant sectors and into integrated planning, budgeting, decision-making and implementation, at the county levels.
- b) Establish the urban centres framework necessary to reduce, reuse, recycle, minimize and sustainably manage solid waste
- c) Incentivize private sector involvement in building and operating solid waste management infrastructure, including through PPPs

4.4 Guiding Principles

The implementation of this Policy will be guided by the following principles:

1. Polluter pays

Those responsible for causing pollution or generating solid waste should pay for the cost of dealing with the pollution, or for managing solid waste collection and disposal in order to maintain ecological health and diversity. Individual responsibility for solid waste management should be encouraged. It is essential to develop funding mechanisms based on the polluter pays principle, which will sustain solid waste management in the future.

2. Precautionary principle

When an activity may lead to unacceptable but scientifically uncertain harm to human health or the environment, actions will be taken to avoid or diminish that harm without having to await the completion of further scientific research.

3. Consultation

All levels of government, communities and organizations should be consulted throughout the development and implementation of solid waste management strategies and action plans. Such strategies or plans should be openly accessible to those in the community who are interested.

4. Waste hierarchy

This is a strategic tool which prioritizes actions for solid waste management. The general hierarchical model that will be used under this policy consists of– Avoidance, Reduce, Reuse and Recycle. This model prioritises waste avoidance and reduction methods, before reuse, recycling, and final disposal.

5. Proximity

Solid waste should be managed as close to the source as possible. This recognizes the need for producers of waste to take responsibility for the management of that waste. It also recognizes that there are costs - both environmental and financial - associated with transporting waste over longer distances.

6. Partnership

Building partnerships, collaboration and synergies among various stakeholders from the public, civil society and private sector, as well as vulnerable communities and populations including women and youth, will be prioritized to achieve effective implementation of this Policy.

7. Integrity and transparency

The mobilization and utilization of financial resources shall be undertaken with integrity and transparency in order to eliminate corruption and achieve optimal

results and ensuring that communities are given all relevant information in a timely fashion.

8. Zero Waste

The principle that society should aim for zero waste, designing and managing products and processes that reduce and eventually eliminate the volume and toxicity of waste, to conserve and recover waste resources rather than to burn or bury them. It is related to the waste hierarchy, which establishes an order of preferred actions to manage waste, and the three R's: reduce reuse, recycle

CHAPTER 5: POLICY INTERVENTIONS

The overall aim this policy is to enhance solid waste management for provision of a clean and healthy environment to the residents.

In order to achieve the main aim, the following strategic objectives shall be employed:

5.1 Effective and Efficient Waste Collection and Transportation

Waste will be transported in an environmentally sound manner without causing pollution or bad odor or further littering. A waste manifest system enables tracking of transportation of waste both hazardous and non-hazardous till it reaches its disposal destination

We shall introduce a solid waste management zoning plan. This will provide the framework for the municipality spatial coverage.

Policy statements

The Department shall:

- 1) *Review the Existing zoning plan to ensure to make effective and efficient*
- 2) *Ensure that waste service providers transport their waste to materials recovery facility and to a landfill.*
- 3) *Ensure waste transportation trucks adhere to air quality regulations.*
- 4) *Develop guidelines requiring all legal entities or individuals transporting waste within the municipality provide tracking documents of source and destination.*
- 5) *Ensure that transportation of recycled materials and waste should be conducted in an environmentally sound manner.*

5.2 Waste segregation at source

This will include all measures to ensure quality of materials extracted from waste and reprocessed is maintained for the realization of maximum value of resources and environmental protection from waste. The following policy measures shall apply to waste segregation.

Policy statements

The department shall

- 1) *Enforce waste segregation at source based on the national gazetted minimum waste fractions for all waste generators including household level.*
- 2) *Ensure separate waste segregation containers are provided to enable sorting at source of organic waste, recyclable and non-recyclables and educate the waste generators on the prescribed sorting categories and methods.*
- 3) *Carry out public awareness on waste colour codes and importance of proper sorting in all public labelled bins for easier sorting*

5.3 Waste management hierarchy

This policy sets priority order for managing waste as a resource that should be harnessed in the municipality according to the waste management hierarchy by adopting the following policy measures.

Policy statements

The department shall

- 1) *In liaison with County government align Municipality waste management by-laws and strategies to the waste management hierarchy.*
- 2) *Prioritize waste prevention and minimization in conformance to the waste hierarchy when developing waste management plans and legislation.*
- 3) *Liaise with the Busia County Government to set aside sufficient land for waste management activities, and generate jobs and livelihoods from waste collection, recycling, and waste management activities according to the waste hierarchy.*
- 4) *Establish and improve waste management infrastructure to promote source segregation, collection, reuse, set up materials recovery facilities and controlled disposal in engineered landfills.*
- 5) *Provide well managed central collection centers for materials that can be harvested from waste that can be reused.*

- 6) *In consultation with county government institute county regulations to require institutions to ensure that at least 50% of their produced waste is recycled through a licensed service provider*
- 7) *In consultation with county government identify and priorities potential sites for setting up composting plants and financial requirements of setting up composting technology in the municipality.*
- 8) *Establish clear procedures for providing incentives to encourage private sector participation in composting ventures*
- 9) *Ensure the recyclers, bio-waste processors and material recovery facilities shall obtain environmental compliance licenses from NEMA.*

5.4 Public sensitization

Illegal dumpsite and indiscriminate disposal of wastes along the streets, alleys, river banks, and open spaces and undeveloped land are norms within the municipality.

Policy statements

The department shall:

- 1) *Undertake awareness and sensitisation programme for sustainable SWM service provision.*
- 2) *Training and sensitization of leaders and Municipal staff on SWM;*
- 3) *Institute clean days to sensitize Public awareness creation on SWM issues i.e. by-laws, community involvement, source separation, and neighborhood clean ups; Demonstration and/or pilot SWM projects; Community participation; Community self-regulation, School based programmes such as competition. The hold a mass clean up once a month and this requires adequate political will.*

5.5 Promote waste management initiatives

The incomes earned by the informal waste pickers are extremely low for long hours of work. This is attributed to exploitation by brokers, lack of access to market, and inadequate flow of information on market dynamics. Moreover, the Private Collectors and municipal refuse collection crew has a better waste

recovery opportunity than their counterparts in the informal sector because they have access to key waste production points in the town as well as transportation facilities.

Policy statements

The department shall

- a) *Put in place mechanisms to ensure and enhance the participation of the local youth and women in solid waste management governance and project implementation, and to help them avail themselves for the opportunities of casual engagements.*
- b) *Undertake a systemic analysis of the various special needs and ensure that planning and waste management responses mainstream participation and protection to persons with special needs.*
- c) *Support the formation and full engagement of waste collection, separation, recycling and waste picker cooperatives (SACCOs) to enhance the provision of waste management services and formalize these important links in the waste management value chain.*

5.6 Strengthen the Institutional and Organizational Capacity

Inadequate budgetary allocations, shortage of vehicles, inappropriate employment and allocation of staff, and lack of proper planning and systematic approach are hindrance in solid waste management.

Policy statements

The department shall

- a) *Develop a municipal waste management plan which is aligned to this policy.*
- b) *Ensure that waste service providers are trained and Licensed including collector and transporters.*

5.7 Capacity Building for Effective Solid Waste Management

The waste collection efficiency in Busia is rated low and the reason for low collection includes financial constraints, shortage of vehicles and staff. To improve collection by public and private sector as well as SMEs requires the following:

Policy statements

The department shall

- a) Capacity building of environment section to be able to provide the enabling environment for the other actors to take part in the sector.*
- b) Strengthen the environment unit.*
- c) Build capacity among the stakeholders on proper waste management*
- d) Enhance skilled staff establishment.*

5.8 Enhance proper handling, collection and disposal of hazardous wastes.

This policy seeks to address medical waste collected for treatment at the County referral hospital and other related facilities.

Policy statements

The department shall

- a) Enact legislation to provide guidelines for handling hazardous wastes at the municipality level*

5.9 Promote research and technological knowledge on solid waste management

Waste management is a dynamic paradigm and requires consistent research and innovation as new waste streams are released regularly. Universities and research institutions play a critical role in generating data to guide decision making as well as innovation development. Currently, there is inadequate research being carried out on waste management.

Policy statements

The department shall

- a) *Establish linkages with the government, academia, private sector, civil society and global sustainable waste management innovation institutions.*
- b) *Identify research and technology needs for enhancing SWM in the municipality*

CHAPTER 6: MONITORING, EVALUATION AND REVIEW

The municipality shall set up Monitoring and Evaluation unit whose sole mandate shall be enable periodic resource inventories and collection and compilation of information on status of solid waste management within the municipality.

Public provides inputs to periodical reviews of the policy.