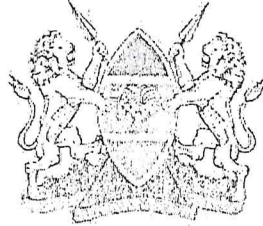
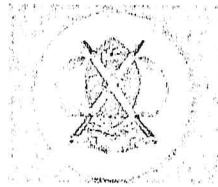


REPUBLIC OF KENYA



COUNTY GOVERNMENT OF NYAMIRA



NYAMIRA MUNICIPALITY

Solid Waste Management Policy

© JULY 2019

COUNTY GOVERNMENT OF NYAMIRA
EXECUTIVE COMMITTEE MEMBER
LAND, HOUSING & URBAN DEVELOPMENT

David G. O.
Certify the Policy

FOREWORD

The Nyamira Municipal Board in its effort to offer a hygienic and fit environment to the residents of Nyamira Municipality has committed itself towards implementing to the letter the solid waste management policy. As a symbol of this commitment, the Board has established this policy for solid waste management. The policy addresses the Municipality's solid waste management desires and demonstrates the approaches through which the municipality will handle all types of wastes generated within its jurisdiction. The policy will emphasize on enhancing solid waste collection and disposal and waste reduction.

The Municipality's Solid Waste Management document builds on the previous planning efforts and describes policy measures for expanding the waste management programs in the Municipality. In this manner, the policy is intended to serve as a management tool for the board.

The policy underscores the need for combined solid waste management approach that meet sound economic and environmental purposes which often require waste types that are generated individually to be kept separated throughout the collection, processing, recovery and disposal categorization. Previous practices had all waste types mixed in the management cycle, which resulted in health and environmental hazards and hindered recycling and recovery of the resources. Finally, I give gratitude to all those who participated in the development of this policy. My selfless appreciation also goes to my colleagues who gave critique towards completion of this document. My appeal is for us to work as a team to ensure delivery of a comprehensive solid waste management system.

Mr. Peter Bitu

CHAIRPERSON

NYAMIRA MUNICIPAL BOARD



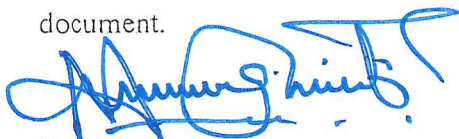
PREFACE

One of the major challenges facing Nyamira Municipality is that of management of solid waste. It is with this premise that the municipality established a solid waste management policy that will be in continuous development to integrate any fundamental issues that may arise regarding solid waste.

The resolve of this waste management policy is to offer a basis for the premise earlier mentioned so as to fully tackle the problem of solid waste so as to achieve minimal if not zero waste generation. The policy will ensure inclusivity with stake holders and the municipal community at large to ensure and sustain service delivery as regards to solid waste management.

The policy will act as a guide in service delivery and provide the Municipal Board a platform for improvement of the current solid waste management plans so as to enable authentic and suitable response to solid waste management challenges. This policy is also an assertion of the Board's responsibility to strengthen its campaign against inappropriate discarding of solid waste onto the environment. The definitive goal of this policy is an assurance to the residents of Nyamira municipality a clean, healthy and safe environment as enshrined in the constitution.

My gratitude goes to all departments in the County Government of Nyamira and the staff at the Department of Lands Housing and Urban Development for their energies and assurance in the implementation of this policy. Many regards also to the Nyamira Municipality community and various stakeholders who gave their input in development of this policy document.



Hon. Jackson Mogusu

MUNICIPAL MANAGER

NYAMIRA MUNICIPAL BOARD

ABBREVIATIONS

CBD	Central Business District
CBOs	Community Based Organizations
CSOs	Civil Society Organizations
ISWM	Integrated Solid Waste Management
NMB	Nyamira Municipal Board
GWASCO	Gusii Water and Sanitation Company
KIE	Kenya industrial estates
NEMA	National Environment Management Authority
NGOs	Non-Governmental Organization
PCs	Private Companies
PS	Private Sector
PPP	Public Private Partnership
SMEs	Small -- Medium Enterprises
SWM	Solid Waste Management

SOLID WASTE MANAGEMENT POLICY FOR NYAMIRA MUNICIPALITY

1.0 Introduction

1.1 Nyamira Municipality

Nyamira Municipality is located in Nyamira County which was formerly part of Nyanza Province. The County occupies a total land area of more than 912.5 square Kilometers.

According to the 2009 National population census results the Municipality had total population of 102,607 persons. Currently, the Municipality is estimated to have a population of 145,000 people and it is also projected to reach 164,124 people in year 2020.

1.2 Nyamira Municipal Board (NMB)

Nyamira Municipal Board is established pursuant to Article 184 of the Constitution of Kenya and the Urban Areas and Cities Act CAP 275 of the Laws of Kenya. The Board was inaugurated on 19th September, 2018 following the approval of the Municipal Charter by the County Assembly of Nyamira. The Board has nine members headed by the Chairman and the Municipal Manager who as the secretary and head of the Executive. The charter spells out the mandate of the Board and key among them being Solid Waste Management (SWM).

1.2.1 Mandate

The Mandate of Nyamira Municipal Board is drawn from the Urban Areas and Cities Act 2011 of the Laws of Kenya and the Nyamira Municipal Charter.

The Mandate includes:

- Overseeing the affairs of the Municipality
- Developing and adopting policies, plans, strategies and programs, and setting targets for delivery of services
- Formulating and implementing integrated development plan for the Municipality by controlling land use, land sub-division, land development and zoning by public and private sectors for any purpose, including industry, commerce, markets, shopping and other employment centres, residential areas, recreational areas, parks, entertainment, passenger transport, agriculture, and freight and transit stations within the framework of the spatial and master plans for the Municipality as may be delegated by the County Government
- Promoting and undertaking infrastructural development and services within the Municipality as may be delegated by the County Government
- Developing and managing schemes, including site development in collaboration with the relevant National and County agencies

- Maintaining a comprehensive database and information system of the administration and providing public access thereto upon payment of a nominal fee to be determined by the Board
- Administration and regulating of internal affairs and
- Implementation of applicable National and County legislation

2.0 SITUATION ANALYSIS

2.1 The Waste Management Problem

Waste management remains one of the major environmental challenges facing most urban centers in Kenya today and Nyamira Municipality is no exception. It's lack of management therefore has had a major implication to the health, Environment, Economy and the Society at large. Lack of good waste management affects negatively the environmental quality indicators such as aesthetics, ecology and human health. Reducing these negative impacts requires best practices in the way waste is generated, stored, transported and disposed.

Bad practices with negative impacts to air, water and soil quality need to be stopped. When materials are burnt, pollutants are released to the air, water soil and life support systems. These negative impacts need to be minimized by introducing best technologies and environmental practices.

Nyamira Municipality like many other urban areas in Kenya is facing a major challenge in SWM which require an elaborate policy framework for addressing it.

A study report carried out by Ministry of Land, Housing and Urban development in the year 2016, indicated that the Municipality is projected to be generating tons of solid waste domestic waste and Non -domestic wastes per day by the year 2020 with an average daily per capita waste generation of 0.32 kgs. The World Bank Report for African countries the Annual growth rate of waste generation is 2.09 %. Currently, it is estimated that the Municipality generates over 10 tons of garbage per day of which 60% is collected and disposed.

The Solid Waste Management (SWM) in the Municipality involve three stages and includes; Storage and Collection, Transportation and Final Disposal.

2.1 Waste Storage, Collection and Transportation

The Municipality is zoned into 2 zones which consist of Zone 1 covering Nyamira Town Central Business District (CBD). Zone 2 covers all areas of Bonyamatuta, Nyamaiya, part of Bogichora, part of Bosamaro and Bomwagamo and partly Kiabonyoru and Kebirigo.

In terms of frequency, daily Collection and transportation services are provided daily in zone 1 and at least twice a week on zone 2. Garbage collection services in zone 1 is carried out by the Town administration whereas zone 2 is under the ward administration.

2.2 Solid Waste Disposal Methods

Waste disposal is a major environmental challenge in Nyamira town. The common methods practiced include open dumping, open burning, incineration of medical waste, informal waste picking. Of these methods, open dumping is the main mode of disposal in Nyamira town. Disposal site is at a rented area in Kemasare has been in use since the time of Nyamira town council. The facility is poses health and environmental threat to neighboring land uses especially the Kemasare Primary & Kemasare Secondary schools.

2.3 Waste Recovery initiatives

The Municipality's waste is generally organic (55.94%) with substantial quantities of valuable components which account for 42:67 % of waste generated. Some of the valuable's category can be reused and recycled such as Paper, Cellulose material, plastic, rubbles and aggregate material such as glasses and metals. Informal waste recycling initiatives are carried out by waste pickers especially at the dumpsite and residential areas. There are a few formal wastes recycling initiatives in town and mainly engage in pre-processing and assemblage of recyclables waste.

2.4 Institutional Capacity for Solid Waste Management in Nyamira Municipality.

The Environment unit which currently handles solid waste management matters in the Municipality does not have the requisite personnel for effective SWM operations. The unit has a workforce of 50 members of staff who are casual labourers and are not skilled to ensure effective delivery of quality service.

2.5 Financial Aspects

The cost of transportation is high and handled by the department of environment as currently there is no sufficient transportation equipment. Secondly, people who are not connected to the water supply system pay the solid waste cost directly to the County through payment with the business permits.

2.6 Public Participation

Community participation in SWM is very low and this is shown by limited awareness and knowledge on the importance of a clean and healthy environment. As such, there is poor handling of waste at the household level including lack of segregation, reuse, reduce and recycling. In addition, negative attitude towards waste management and failure to take individual responsibility has contributed to poor practices such as littering, illegal dumping and open burning. These malpractices are common at the household level where residents indiscriminately dispose garbage haphazardly without due regard for the health and environmental implications.

2.7 Regulatory and Policy framework on SWM

2.7.1 National Legislative and Regulatory Framework for Waste Management in Kenya

The Constitution of Kenya (CoK) article 42 states that every Kenyan citizen has a right to a clean and healthy environment that includes the right to have the environment sustainably protected through legislations and other measures. It also devolved solid waste management to the 47 county governments. This is implemented through various policy and regulatory frameworks as follows:

- Environmental Management and Coordination Act Cap 387 and the EMCA Waste Management regulations (2006) provide a general framework for waste management in Kenya and provide a guide for licensing, transportation and disposal of waste. The generator of waste, transporter, recyclers and institutions that own disposal facilities have obligations to ensure the activities do not deprive citizens the above constitutional right.
- The Waste Management Regulations- 2006 provide a framework for managing the environment including waste management and classifies waste as hazardous and non-hazardous waste, with a focus on transportation, disposal licensing and burying of

waste. National Environment Policy 2013 acknowledges that unsustainable consumption and production patterns leads to excessive waste generation and calls for development of integrated national waste management strategy, promotion of economic incentives to manage waste and promotion of clean production, waste recovery, recycling and reuse.

- The Occupational Safety And Health Act, 2007 Part IX Chemical Safety, Section 83 Subsection IV states that at every workplace where chemicals or other toxic substances are manipulated, the employer shall develop a suitable system for the safe collection, recycling and disposal of chemical wastes, obsolete chemicals and empty containers of chemicals to avoid the risks to safety, health of employees and to the environment.
- The National Environmental Management Authority (NEMA) Waste Management Strategy (2015) aims to create a 7R oriented society in Reducing, Rethinking, Refusing, Recycling, Reusing, Repairing and Refilling. Focus areas being waste collection, transportation, and disposal and licensing. The order prescribed by strategy of the 7R is not in any environmental waste management priority. The strategy also focuses attention on the 5 urban centers proposed by Vision 2030.
- Gazette Notice number 2356 of February 2017 totally ban on the manufacture, sale, export and importation of plastic carrier bags in Kenya.
The ban of the polythene carrier bags effected in August 2017 contributed a positive impact towards minimizing waste generation in Kenya.
- Kenya Nationally Determined Contribution waste is considered a key mitigation sector for the reduction of green gas house emissions. Nationally Appropriate Mitigation Action (NAMA 2016) proposal for a Circular Economy Solid Waste Management Approach for Urban Areas in Kenya was developed by the MENR in 2016. The NAMA concept includes waste sorting, creation of recycling points, recycling of 600 tons of waste per day and composting facilities for organic waste treatment.
- The National Climate Change Action Plan 2018–2022 proposes to reduce GHG's emissions through adoption of circular approaches to waste management and engineered landfills.

- Additional instruments include Kenya vision 2030, Draft chemical regulations, 2019, Pest Control Products Act, Cap 346 Asbestos guidelines, Air quality regulations 2014 and E-waste guidelines (2014)

2.7.2 Existing Legislative and Regulatory Framework for Waste Management in Nyamira Municipality

The challenges facing SWM in Nyamira Municipality is mostly due to inadequate policy and regulatory framework. The County has been operating on the conservancy policy which lay emphasis on collection and disposal of refuse as outlined in local government act CAP 265(repealed). The local county government act does not mention SWM but it provides that local authorities are mandated to provide solid waste management services. Section 160 (a) provides that local authorities establish and maintain sanitary services for destruction of, or otherwise dealing with all kinds of refuse and effluent and where any such service is established, to compel the use of such service by persons to whom the service is available. The provision implies that local authorities are mandated to provide SWM services.

Other sectorial statutes which provide for SWM are the public health act CAP 372 and Environmental management and coordination act (EMCA) 1999. EMCA (1999) allocates considerable property rights as far as various aspects of environmental management are concerned.

NEMA has also enacted solid waste management regulations of 2006 which provide and elaborate guidelines for handling of SWM in general. It is expected that that the Municipal Board will use these guidelines to develop their own SWM by- laws that seeks to domesticate them for the purpose of promoting a clean, safe and healthy environment at the local level.

The County Government of Nyamira is expected to enact county-based Policies and legislation on solid waste management matters.

Generally, the municipality does not have an elaborate policy and legislation which address SWM matters adequately. The existing by -laws are obsolete and does not adequately provides for the integrated approach of handling SWM. The policy should encompass all aspects of SWM right from the generation to disposal including provision for waste minimization, composting, informal sector and private sector involvement.

3.0 THE POLICY INSTRUMENT

3.1 Policy Statement

Nyamira Municipal Board recognizes solid waste as a resource that should be managed so as to ensure a clean, safe and healthy environment for improved quality of life, promote ecological integrity and encourage economic vitality in a way that facilitates sustainability (as envisaged in the constitution of Kenya 2010)

3.2 Guiding Principles

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

- I. **Right to a clean and healthy environment:** Under the Constitution, 2010 every person in Kenya has a right to a clean and healthy environment and a duty to safeguard and enhance the environment.
- II. **Right to sustainable development:** The right to development will be respected taking into account economic, social and environmental needs. Kenya seeks to achieve people-centered development that builds human capabilities, improves people's wellbeing and enhances quality of life.
- III. **Principle of Environmental Protection:** There is need to balance socioeconomic development and environmental protection. In undertaking waste management, all entities and individual should provide high level of human, health and environmental protection.
- IV. **Principle of Proximity:** To minimize environmental impact and transport costs. In accordance to the principle of proximity, waste should be processed, treated and disposed as much as possible to the location of its generation.
- V. **Precautionary Principle:** The principle states that measures should be taken even if some causes and effect relationships are not fully established scientifically when an activity or product raises threats of harm to human health or the environment.
- VI. **Polluter pays principle:** The principle states that those who produce pollutants or waste should bear the costs of managing it to prevent damage to human health or the environment.
- VII. **Zero Waste principle:** The principles states 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. The Waste hierarchy establishes preferred program priorities

based on zero waste principle and sustainability. The standard outline of the hierarchy ranks 6 approaches to waste management. In order (most preferable to least preferable) these are: prevention, minimization, reuse, recycle (including composting), energy recovery and disposal.

- VIII. **Extended producer responsibility:** The principle states that producers should be given significant responsibility financially and/or physical for the treatment or disposal of the waste from the products they create. Beyond easing government budgets for waste management, such responsibility in incentives companies to prevent wastes at the source, promoting more environmentally friendly product design and supporting the achievement of public recycling and materials management goals.
- IX. **System of deposit;** When buying certain products, the buyer shall pay a certain added value to the price of the product, which shall be returned to him/her upon restitution of the used products and the packaging to the seller, provided that there is a possibility for the used products and the packaging to be processed, for which they need to be labelled in a manner that is established by law and another regulation.
- X. **Partnership:** Building partnerships, collaboration and synergies among various stakeholders from the public, government, non-governmental organizations, 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. The private sector will be encouraged to develop capacities for investment, construction and service delivery in recycling and waste management.
- XI. **Devolution and Cooperative government:** embracing a system of consultation, negotiation and consensus building in implementation of sustainable waste management between and within the National and County governments.
- XII. **Equity and social inclusion:** ensuring a fair and equitable allocation of effort and cost, as well as ploughing back of benefit's in the context of the need to address disproportionate vulnerabilities, responsibilities, capabilities, disparities, and inter- and intra-generational equity. The communities that benefit from sustainable waste management shall be actively involved in planning and decision-making.

3.3 Policy Objectives

This policy sets out the aim of the Nyamira Municipal Board (NMB) to gain control over the waste generated. The policy will lend special emphasis on waste generators responsibility, private sector initiatives, and Solid Waste hierarchy

3.4 The Integrated Solid Waste Management Strategy (ISWM).

Waste management issues run across various aspects of our daily life from households to communities, cities, regions and country level. Each level is comprised of stakeholders that play a pivotal role to waste management system wherein activities of each directly affect the effectiveness of the system. Recent years have shown the increase of community-oriented approach towards waste minimization in many cities all over world. Partnerships among stakeholders have been built, bridging linkages between the formal and informal players in waste system in both public and private sectors.

As financing is one of the major constraints of many County Government agencies in Kenya to address waste problems, multi-stakeholder partnership is potentially one of the most viable solutions as it brings and taps in potential financial resources. The increase in participation of external agencies such as international and local organizations as well as private entities in solid waste management (SWM) has also contributed substantially to the inadequacies and limited administrative and technical capacities of county/local governments.

The increase in community-based approach in waste management is an encouraging feature in many cities in the world. However, many of these initiatives have placed bigger emphasis on waste disposal and recycling. Relatively little has been done to tackle urban organic wastes that generally represent over 50 percent of the total waste generation. Addressing this aspect would amount to achieve benefits for stakeholders like County governments as it induces savings on operational cost of waste transport and reduce the impact on disposal sites. Furthermore, it reduces waste collection and management costs and opens income opportunities for communities and households.

COUNTY GOVERNMENT OF NYAMIRA
EXECUTIVE COMMITTEE MEMBER
LAND, HOUSING & URBAN DEVELOPMENT

4.2 POLICY INTERVENTIONS

4.2.1 The SOLID WASTE MANAGEMENT POLICY

The overall aim of the Solid Waste Management policy for the Nyamira Municipality is to enhance solid waste management for provision of a clean and healthy environment to the residents of Nyamira Municipality. As highlighted above the main solid waste management problems facing Nyamira Municipality include;

- Inefficient and ineffective solid waste collection and transportation system.
- Inadequate capacity in SWM
- Indiscriminate waste disposal
- Poor waste disposal and treatment.
- Inadequate stakeholder involvement in SWM
- Uncoordinated informal solid waste minimization activities.
- Inadequate systems for handling hazardous waste
- Inadequate financing mechanism for SWM
- Low coverage of waste collection services
- Irregular collection
- Inappropriate siting of disposal site

4.2.2 GOALS FOR SOLID WASTE MANAGEMENT

1. Protection of public health
2. Reduction of poverty
3. Reduction of waste management costs
4. Protection of environment and ensure sustainable development

In order to achieve these goals, the following strategic objectives are proposed to improve solid waste management in entire Nyamira municipality;

- To improve waste collection and transportation efficiency and effectiveness.
- Promote waste management through the adoption of waste management hierarchy
- To promote proper waste disposal and treatment • To reduce waste and maximize reuse and recycling
- To educate and sensitize the public on SWM.
- To promote solid waste recycling initiatives.
- To strengthen the institutional and organizational capacity in solid waste management
- To promote collect and dispose of hazardous waste sustainably
- Enact relevant legislation on SWM

- To formulate policies, legislations and economic instruments to reduce waste quantities
- To inculcate responsible public behavior on waste management
- To promote waste segregation at the source
- To promote resource recovery for materials and energy generation
- To establish environmentally sound infrastructure and systems for waste management

These issues will be addressed in the following section, with the identification of each problem, specific objectives and key actions.

Objective1: To Enhance Waste Collection and Transportation efficiency and effectiveness.

Solid waste collection efficiency and effectiveness is hampered by Inaccessible roads, lack of payment for waste services, lack of zoning of waste collection areas, poor scheduling of waste collection, low budgetary allocation for operations, Low investment in acquisition of compliant waste trucks and inadequate transport in which the available vehicles are old and which are always prone to breakdown leading to lapse in the provision of services. Waste collection at the house hold level where sorting of waste is not done.

Proposed Policy Measures for Waste collection and Transportation.

Waste should 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 both hazardous and non-hazardous waste till it reaches its disposal destination.

A Waste management zoning plan provides that the framework for the town's spatial coverage of solid waste management is needed. This arrangement aims to provide an enabling environment for the realization of public-private-partnerships through;

- The issuance of service contracts by the Board whenever required.
- Elimination of the problem of coordination, duplication of efforts and resources;
- Curb unhealthy competition by waste management stakeholders;

Reduce long travel routes in search of customers and thus increase level of service provision through benchmarking;

Act as basis for waste commercialization i.e. franchise depending on the capacity and level of technology required.

The policy will also seek to embrace the Involvement of community groups and private sector in waste collection and transportation

Policy statements

The board shall:

- Review the existing zoning plan to ensure effectiveness and efficiency in the operational areas.
- Enhance waste collection and transportation capacity
- Ensure that waste service providers transport their waste to materials recovery facility and to a landfill.
- Ensure waste transportation trucks adhere to air quality regulations.
- Develop guidelines requiring all legal entities or individuals transporting waste within the municipality provide tracking documents of source and destination.
- Ensure that transportation of recycled materials and waste should be conducted in an environmentally sound manner.

Objective 2: Promote waste segregation at source

Waste segregation includes 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

- Enforce waste segregation regulations at source based on the national gazette minimum waste fractions for all waste generators including household level.
- 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.

- Carry out public awareness on waste colour codes and importance of proper sorting in all public labelled bins for easier sorting

Objective 3: Promote waste management through the adoption of waste management hierarchy Proposed Policy Statements

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.

The board shall:

- In liaison with County Government align County waste management laws and strategies to the waste management hierarchy.
- Prioritize waste prevention and minimization in conformance to the waste hierarchy when developing waste management plans and legislation.
- Liaise with the County Government of Nyamira 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.
- Establish and improve waste management infrastructure to promote source segregation, collection, reuse, set up materials recovery facilities and controlled disposal in engineered landfills.
- Provide well managed central collection centers for materials that can be harvested from waste and can be reused.
- 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
- In consultation with County Government, identify and prioritize potential and financial requirements of setting up composting plants and technology in the municipality.
- Establish clear procedures for providing incentives to encourage private sector participation in composting ventures
- Ensure the recyclers, bio-waste processors and material recovery facilities shall obtain environmental compliance licenses from NEMA. Develop a 3-year plan to transit from the current Open dumpsites and adopt land filling for residual waste. Initiate the process of closure of open dumpsites and establish engineered landfills for disposal of non-recoverable fractions of wastes.

- Promote the establishment of incineration (waste-to-energy programs)

Objective 4: To Educate and Sensitization the Public on SWM.

Negative attitudes and lack of cooperation from the community on SWM and environmental cleanliness is a major constraint towards achieving sustainable SWM in Nyamira Municipality. Consequently, a lot of illegal dumpsite and indiscriminate disposal of wastes along the streets, alleys, river banks, and open spaces and undeveloped land is a norm rather than the exception.

Policy statements

The board shall;

- Undertake community awareness and sensitization programs for sustainable SWM service provision.
- Training and sensitization of leaders and staff on SWM.
- Institute clean up days.

Objective 5: To promote community small scale waste management initiatives

The income earned by the informal waste pickers is 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.

Objective 6: To Strengthen the Institutional and Organizational Capacity in Solid Waste Management

Policy Measures on Strengthening the Institutional Framework

The reason for low collection includes insufficient financial outlays, shortage of vehicles, inappropriate employment and allocation of staff and lack of proper planning and systematic approach by the Environment Unit. The shortcomings of the SWM program in Nyamira Municipality are also contributed partly by inadequacy of political and institutional support on SWM in the past. Consequently, SWM is not adequately prioritized by the County as well as National government in allocation of funds for purchase of facilities, equipment and operational costs.

Policy statements

The Board shall;

- Ensure adequate financial provision for SWM services
- Establish SWM unit with adequately trained personnel and equipment
- Develop municipal waste management plans which are aligned to this policy.
- Ensure that waste service providers are trained and Licensed including collector and transporters.
- Build capacity among the stakeholders on proper waste management

Objective 7: To enhance proper handling, collection and disposal of hazardous wastes.

The municipality does not have an adequate policy to address hazardous waste and medical waste. Medical waste is collected for treatment at the County referral hospital and with the increased generation of such wastes, their capacity may be overwhelmed in future.

Policy statements

The board shall;

Enact legislation to provide guidelines for handling hazardous wastes at the municipality level

Objective 8: Enhance Financial Mechanism for SWM

Policy Statements

The board shall;

- Liaise with County government to ensure that adequate resources are allocated for sustainable waste management actions in county budgetary processes and solicit for donor support.

Build capacity to mobilize and enhance absorption of resources for sustainable waste management interventions.

Promote the creation of green jobs by establishing and enabling policy framework for investment, creating business friendly regulatory environments in recycling, green economy, and sustainable waste management.

- Support waste management enterprises at the Municipality level, including those that are run by vulnerable and marginalized Groups.
- Oversee sector specifics; anti-corruption, transparency, accountability and integrity mechanisms to safeguard prudent management of finances.
- Waste generators including individuals and households shall contribute to the cost of waste management services

Objective 9: Maintain a data base on SWM in the municipality

The Municipality's ability to respond effectively to the waste challenge requires enhanced data collection on waste generation, current waste disposal practices, waste minimization, reuse and recycling opportunities, as well as the impacts of the current poor state of waste management on public health and the environment.

Policy statements

The board shall

- Set up data collection system of the Municipality waste streams, volumes generated and how they are handled.
- Register service providers to ensure that all policy and regulatory decisions at the Municipality level are informed and are based on credible data.
- Incorporate waste management indicators into the Municipality's Integrated Monitoring and Evaluation System

Objective 10: 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 board shall;

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

ANNEX 1 - SOLID WASTE MANAGEMENT POLICY- IMPLEMENTATION MATRIX.

No	objective	Key actions	Responsible Agency	Time frame
1	To enhance solid waste collection and transportation services in Nyamira municipality	Review the existing zoning plan to ensure effectiveness and efficiency in the operational areas.	NMB Board	2 Years
		Provision of appropriate SWM vehicles and equipment.	NMB Board	2 years
		Promoting an Enabling Framework for Public Private Partnership (includes the private and community groups.	NMB Board	2 years
		Establish community committees to oversee SWM operations especially at the household level.	NMB Board	2 Years
		Increase manpower	NMB Board	2 Years
2.	Public awareness and education on SWM.	<p>Conduct public awareness campaigns on Proper SWM.</p> <p>Designate clean- up days for whole town (for instance first or end week of every month or quarterly).</p> <p>Hold workshops, seminars on SWM</p>	NMB Board, County Government of Nyamira NEMA, CBOs and NGOs	Monthly (Every Year)

3	Promote waste segregation at source	<p>Enact county regulations to promote waste separation at source</p> <p>Promote waste separation and sorting at household level.</p> <p>Install litter bins to control littering and promote waste separation</p> <p>Enact and enforce SWM by-laws to support waste separation and sorting.</p> <p>Identify sufficient land for waste management activities</p> <p>Establish small-scale recycling plants</p> <p>Organize and formalize informal waste entrepreneurs into cooperatives/SMEs. Promote wastes composting</p>	<p>NMB Board, County government of Nyamira & County Assembly of Nyamira</p> <p>NMB Board</p> <p>NMB Board</p> <p>NMB Board & County Government Of Nyamira</p> <p>NMB Board, County Government of Nyamira NEMA, CBOs and NGOs</p> <p>NMB Board, County Government of Nyamira NEMA, CBOs and NGOs</p>	<p>3 years</p> <p>3 years</p> <p>1 Year</p> <p>2 years</p> <p>2 Year</p> <p>1 years</p> <p>3 Years</p>
---	-------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------

4	Improving waste disposal and treatment	Acquire dumping site and establish engineered landfills for disposal of non-recoverable fractions of wastes.	NMB Board & County Government of Nyamira	2 Years
		Introduce controlled tipping system practices at the disposal sites to remove mal odors, litter and other nuisance and to minimize the problem of flies and vermin.	NMB Board NMB Board	2 Year
		Promote waste to energy technologies and investment ventures through fiscal incentives and infrastructure development.	NMB Board & County Government Of Nyamira	2 years

		Develop a 3-year plan to transit from the current Open dumpsites and adopt land filling for residual waste.	NMB Board & County Government Of Nyamira	3 Years
5	To strengthen institutional capacity	Recruitment of additional staff Staff training on SWM Improvement of working conditions	NMB Board & County Government of Nyamira	2 years
6	Proper handling of hazardous wastes	Promote waste separation at source. Provide incineration services. Contract private sector firm that specialize in handling and disposal of hazardous wastes	NMB Board & County Government of Nyamira	2 years

7	Improved street, drainage, market and parks cleaning services	<p>Provision of adequate litter bins on strategic positions in town.</p> <p>Provide additional labor.</p> <p>Ensure regular litter collection.</p> <p>Enforce SW by-laws to discourage littering.</p>	NMB Board	2 years
8	Promote community based waste management initiatives	<p>Encourage and promote the formation of small and micro waste enterprises at neighbourhood level.</p> <p>Provide training to the small-scale entrepreneur on SWM,</p> <p>Provide space or land for community groups engaged in SWM activities.</p> <p>Establish strong partnership with waste cycling industries (to provide market facilities for their products)</p>	NMB Board, County Government of Nyamira NEMA, CBOs and NGOs	3 years
9	Promote research and technological knowledge on solid waste management	<p>Establish linkages with the government, academia, private sector, civil society and global</p> <p>sustainable waste management innovation institutions</p> <p>Conduct study on SWM</p> <ul style="list-style-type: none"> • Waste classification (characterization and analysis) • Waste minimization potential. • Marketing potential for the recyclables. 	NMB Board	5 years

10	Maintain a data base on SWM in the municipality	<p>Set up data collection system of the Municipality waste streams, volumes generated and how they are handled</p> <ul style="list-style-type: none"> ❖ Incorporate waste management indicators into the Municipality's Integrated Monitoring and Evaluation System 	NMB Board	2 Years
11	Financial aspects	Ensure that adequate resources are allocated for sustainable waste management actions	NMB Board, County Government and Donor agencies	5 Years

COUNTY GOVERNMENT OF NYAMIRA
EXECUTIVE COMMITTEE MEMBER
LAND, HOUSING & URBAN DEVELOPMENT