

CITY OF CAPE TOWN ISIXEKO SASEKAPA STAD KAAPSTAD

INTEGRATED WASTE MANAGEMENT (IWM) (POLICY NUMBER 60829)

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INTEGRATED WASTE MANAGEMENT (IWM) POLICY

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1. DEFINITIONS AND ABBREVIATIONS

Definitions

In this Policy, unless the context indicates otherwise, any word or expression that is defined in the Act has the same meaning in this policy.

"Act" means the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as amended.

"240 litre container or bin (Wheelie bin)" means a plastic wheeled waste container with a capacity of 240 litres, provided for the storage of waste prior to collection by the City or private sector service provider for disposal or waste diversion in areas identified for containerization.

"accreditation" means the registration of waste service providers as being compliant in terms of the City's IWM By-law 2009 as amended, and related environmental legislation.

"approved container" means the 240 litre container (Wheelie bin),130 litre, Recycling container (Wheelie bin), 660 litre containers, 770 litre containers or any other container for waste storage as approved by the Waste Management Officer.

- "backyarder" means a person who occupies an informal structure in the yard of a formal residence.
- "beneficiation" when used in relation to waste, refers to creation or realisation of the value of a waste stream through mechanisms such as recovery, recycling or re-use, such that it becomes a commodity in the economy.
- "boundary-to- means surface cleaning in public areas and roads under the municipality's jurisdiction up to the boundaries of private properties.
- "building and means waste, excluding hazardous waste, produced during the construction, alteration, repair or demolition of any structure either man made or natural, and includes rubble, earth, rock and wood displaced during that construction, alteration, repair or demolition, which includes discarded concrete, bricks, tiles and ceramics, discarded wood, glass and plastic, discarded metals, discarded soil, sand, stones and dredging spoil and other discarded

building and demolition wastes excluding asbestos waste.

- "bulky waste" means waste generated from households' activities at residential properties which includes items such as broken furniture, equipment or appliances but excludes kitchen waste, garden waste, building/demolition waste and hazardous waste.
- "business waste" means waste that emanates from premises that are used wholly or mainly for commercial, retail, wholesale, entertainment or government administration purposes and includes waste generated by informal traders.
- "'circular economy" is a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing energy and material loops. This is in contrast to a linear economy which is a 'take, make, dispose' model of production.
- "City" means the City of Cape Town, a municipality established by the City of Cape Town Establishment Notice No. 479 of 22 September 2000, issued in terms of the Local Government Municipal Structures Act, 1998 (Act No. 117 of 1998), or any structure or employee of the City acting in terms of delegated authority.
- "clean waste" means waste that is not contaminated by any other type of waste.
- 'clean(er) production' means the continuous application of integrated preventative environmental strategies to processes, products and services to increase overall efficiency and to reduce the impact of such processes, procedures and services on health and the environment.
- "cleansing" means the process of cleaning and removing unwanted substances, such as dirt, infectious agents, and other impurities, from an object or environment. In the context of waste management, it includes; litter picking, removal of dead animals, street sweeping, clearing of illegally disposed waste; and street cleaning which involves the use of water and disinfectants.
- "contained means recyclable waste which is packaged/stored in bin/bag recyclable waste" for transportation or further processing.
- "diversion" when used in relation to waste, refers to any activity which results in a waste stream entering the economy, through mechanisms such

as recovery, recycling or re-use, and thereby not being required to be disposed of in landfill sites.

- "drop-off sites" means facilities provided by the City in strategic locations around the City of Cape Town to reduce illegal dumping by making provision for dropping off of bulky waste, garden refuse and builders rubble and to facilitate waste minimisation through the separation of recyclable materials, garden refuse and clean builder's rubble. These can also be used as temporary transition points for waste (excluding household hazardous waste).
- "entity, or means formal partnerships, corporations, proprietorships or organisations) that is actively participating in the economy, whether profitably or otherwise.

"environmentally as defined in the Local Government: Municipal Systems Act 32of 2000 as amended.

sustainable"

"extended producermeans measures that extend a person or entity's financial orresponsibility (EPR)physical responsibility for a product to the post-consumermeasures"stage of theproduct.

- "formal residential" means formal households as defined in the City's Tariff policy.
- "food waste" means discarded food (organic fraction) generated from residential, industrial and commercial food processes.
- "garden waste" means organic waste which emanates from gardening or landscaping activities at residential, business or industrial properties, which includes but is not limited to grass cuttings, leaves, branches and biodegradable material but excludes food waste and waste products of animal origin.
- "general waste" means general waste as defined in the National Environmental Management: Waste Act 59 of 2008 as amended.
- "hazardous waste" means hazardous waste as defined in the National Environmental Management: Waste Act 59 of 2008 as amended.
- "health caremeans waste capable of producing any disease and includesrisk waste"but is not limited to the following; chemical waste, cytotoxic waste,
genotoxic waste, infectious waste, isolation waste, laboratory

waste, pathological waste, pharmaceutical waste, radioactive waste and sharps waste.

- "health care waste" means waste generated at a health establishment and includes both health care general waste and health care risk waste.
- "high-value scrap" means any scrap metal of high value including copper, aluminium.
- "household means common household chemicals and substances containing toxic ingredients that are no longer useful to the house holder. Examples are compact fluorescent tubes, used oils, asbestos cement heaters and flower pots, old paints, old pesticides, batteries, pool chemicals, etc. It does not include health care risk waste, explosives, etc.
- "household waste" means waste (excluding garden waste and builder's rubble) generated by personal and household activities at premises zoned as "residential properties" as defined in this policy.
- 'industrial symbiosis' is an association between two or more industrial facilities or companies in which the wastes or byproducts of one become the raw materials for another.
- "industrial waste" means waste that emanates from premises that are used wholly or mainly for industrial purposes and generate waste through manufacturing, industrial or fabricating processes, which includes premises used for agricultural land and/or the operation of power stations.
- "informal settlement" means an area where informal housing structures have been constructed on land upon which the occupants have no legal claim, or occupy illegally, or unplanned settlements and areas where housing is not in compliance with current planning and building regulations.
- "integrated waste means an integrated waste management plan which is required by the City in terms of the City of Cape Town's Integrated Waste Management By-law (2009, as amended) or that is required in terms of any other applicable legislation.
- "long term" means a time horizon of longer than five (5) years.
- "minimisation" when used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event

where waste is generated, the reduction of the amount and toxicity of waste that is disposed of.

- "municipal service means a contractual arrangement between a municipality and partnership" another entity (an "external mechanism") to deliver core or top up municipal services. The type of contract should be driven by the type of service and the risk transfer as determined by the feasibility study conducted under section 78 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000).
- "non-residential means all properties not used for residential purposes and includes properties" agricultural land, vacant land, hostels, guesthouses, old age homes, commercial, industrial, farming, government and state-owned enterprises and frail care centres.
- "Organic waste" means waste of carbon-based material of animal or plant origin which includes food, wood and garden waste and can be broken down, in a reasonable amount of time, into its base compounds by micro-organisms and other living things and/or by other forms of treatment, regardless of what those compounds may be. This excludes human made organic chemicals, infectious, poisonous, health-care and hazardous organic wastes.
- "Pareto Principle" (also known as the 80/20 rule, the law of the vital few, or the principle of factor sparsity) states that, for many events, roughly 80% of the effects come from 20% of the causes.
- "person" includes any municipality, or like authority, and any company incorporated or registered as such under any law or any body of persons corporate or unincorporated.

- (ii) been dedicated to the public;
- (b) public transportation operated by service providers for the City,

but does not include public land that has been leased by the City.

- "recovery" means recovery as defined in the National Environmetal Management: Waste Act, 2008 (Act No. 59 of 2008) as amended.
- "recycle" means recycle as defined in the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as amended.
- "recyclable material" means waste that can be reclaimed for further use, and/or converted into raw materials that can be reused to make new products or resources.
- "resident" In relation to a municipality, means a person who is ordinarily resident in the municipality.

"residential properties" means all improved properties, that are used predominantly (60% or more) for residential purposes, may include

- i) Registered in terms of the Sectional Titles Act;
- ii) Owned by a share-block company, flats, and retirement villages used for residential purposes irrespective of the Usage Codes;
- iii) A rateable residence on property used for or related to educational purposes; and organisations accredited by the Executive Director: Area based Service Delivery irrespective of the usage code.
- "re-use" means to utilise the whole, a portion of or a specific part of any substance, material or object from the waste stream for a similar or different purpose without changing the form or properties of such substance, material or object.
- "separation at source" refers to the practice of setting aside post-consumer materials and household goods so that they do not enter mixed waste streams, and includes the dropping off or sale of such materials by the consumer, or the collection of such materials from the consumer for downstream recycling or re-use.
- "service authority" means the power of a municipality to regulate the provision of a municipal service by a service provider.
- "service provider" means a person or institution, or any combination of persons and institutions which provide a waste management service and may include, but are not limited to, large and small businesses, entrepreneurs, community cooperatives, venture learnerships and informal traders.

- "sorted waste" means waste that is separated with the intent to recycle, reuse or to dispose of at the appropriate licenced or authorised waste facility.
- "special events service" means a waste management service that could be provided by the City as a special service at events that requires the use of waste collection equipment (bins, skips, etc.) and/or waste removal services for disposal at a cost as determined by the City in terms of its Tariff Policy.
- "storage" means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste.
- "treatment" means treatment as defined in the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as amended.
- "vacant land" means undeveloped land without built structures, in the City of Cape Town's municipal jurisdiction irrespective of ownership.
- "waste avoidance" means the design of goods, in a manner that minimises their waste components.
- "waste transporter" means any person who conveys or transfers waste between the waste generator and a waste management facility or between waste management facilities.
- "waste"means waste as defined in the National EnvironmentalManagement: Waste Act, 2008 (Act No. 59 of 2008) as amended.
- "waste generator" means any person whose actions, production process or activities, including waste management activities, result in the generation of waste but excludes generators of household waste that is collected by a municipality.
- "waste management consists of options for waste management during the lifecycle of waste, arranged in descending order of priority. The most preferred option is waste avoidance and reduction, followed by re-use, recycling, recovery and the least preferred option being treatment and disposal.

- "waste management" means the avoidance, separation, reuse, containment, diversion, cleaning, handling, transportation, interim storage, recycling and disposal of waste other than untreated sewerage.
- "waste management Facility" means a place, infrastructure, structure or containment of any kind wherein, upon or at which a waste management activity takes place and includes a waste transfer station, container yard, landfill site, incinerator, drop-off site, a recycling or a composting facility.

"waste management

- services"means the undertaking of the waste managementactivities that
individuals, organizations or business entities are responsible for on
their premises or property.
- "waste minimisation club" means a group, typically residing in a high density residential or office building, or a multi-property cluster residential or business development, that has an approved agreement with the City to minimize the waste ordinarily produced according to a sustainable waste management plan.
- "waste streaming, or separation" means the practice of separating different types of waste containing similar materials, e.g. glass, paper, plastics, wood, rubber, etc. as part of a recycling and/or reuse process to ensure that the resulting waste streams are suitable for more effective recycling and /or re-use.

Abbreviation Description

BBC	Buy back centre
C40	Cities Climate Leadership Group
CBD	Central Business District
CBO	Community Based Organisation
CCT	City of Cape Town
CID	Central Improvement District
DEA&DP	Western Cape Department of Environmental Affairs and Development Planning
DEA	National Department of Environmental Affairs
EIA	Environmental Impact Assessment
EPR	Extended Producer Responsibility
EPWP	Expanded Public Works Programme
IDP	Integrated Development Plan of the City of Cape Town
IWEX	Integrated Waste Exchange
IWM	Integrated Waste Management
IWMP	Integrated Waste Management Plan
MFMA	Local Government: Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
MRF	Materials Recovery Facility
MSA	Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000)
MSP	Municipal Service Partnership
NDP	National Development Plan
NGO	Non-Governmental Organization
NWMS	National Waste Management Strategy 2011
NEMWA	National Environmental Management: Waste Act, 2008 (Act No.59 of 2008)
ODTP	Organisational Development and Transformation Plan
PCBs	Polychlorinated Biphenyls
PRO	Producer responsibility organisation
SANS	SA National Standards
SDBIP	Service Delivery Budget Implementation Plan
SLA	Service Level Agreement

- SMME Small medium and micro-sized enterprise
- **SOP** Standard Operating Procedure
- SWM Solid Waste Management
- WIR Waste Information Registration
- WIS Waste Information System
- **WISP** Western Cape Industrial Symbiosis Programme
- WMO Waste Management Officer

2. PROBLEM STATEMENT

In terms of Schedule 5B of the Constitution of the Republic of South Africa, 1996, (Constitution)cleansing, refuse removal, refuse dumps and solid waste disposal, collectively termed as waste management in the City, is listed as local government competences to the extent set out for provinces in section 155(6)(a) and (7) of the Constitution, that must be executed to protect human and environmental health. This statutory obligation is framed by the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000), or MSA and by the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008).

The City recognizes that waste generation occurs in different instances. Waste is generated through the activities of people, business or industrial entities; in this case, there is space to regulate and to control the generation of waste. In the case of natural disasters, accidents or other natural process waste is also generated, but in these instances it becomes more complex to implement the same control mechanisms.

The waste generated in Cape Town by private citizens, tourists, visitors, commerce and industry has resulted in a net growth in the volume of waste. The City does not have unlimited landfill airspace. There is a need to divert waste from landfill so as to ensure that landfill airspace is not depleted sooner than necessary. Given the City's burgeoning population and ongoing increase in the volumes of waste disposed, the City could in future face an environmental and health crisis.

The City, acknowledges its responsibilities to reduce, minimize and dispose waste in an environmentally acceptable manner in order to reduce its impact on the environment and save landfill airspace. Through this policy the City wishes to articulate bold measures to achieve these objectives, protect the environment, and offer progressive, sustainable options for integrated waste management.

Waste must furthermore be managed through various processes that will ensure a safe, healthy and a sustainable environment to ensure that the right of individuals as enshrined in section 24 of the Constitution is protected. Fulfilment of this right requires that all stakeholders must accept co-responsibility for minimizing waste impacts optimally, to ensure environmental sustainability.

3. DESIRED OUTCOMES

a) To align the City's waste management services with National and Provincial legislation and implement the national waste management hierarchy.

- b) To provide a basis for the City's Integrated Waste Management By-law, 2009 as amended that will be used to regulate waste generation and waste management services, as well as serves as a disincentive where necessary.
- c) To provide a platform that enables the integration of mechanisms and functions for maintaining cleanliness standards in the City.
- d) To introduce, facilitate and encourage effective waste minimisation and waste management practices in terms of the national and provincial policy directives.
- e) To be the leading City in South Africa on recycling and waste minimisation and to increase diversion from landfill. To exceed the National Waste Management Strategy targets for total waste diversion. These figures will also be subjected to reporting in terms of the Performance Management procedures of the City and the WIR.
- f) To improve socio-economic sustainability, public and environmental health by providing equitable and sustainable waste management services.
- g) To ensure the effective and financial sustainable long term provision of waste management services solutions.
- h) To guide the City in setting direct or indirect tariffs, and provide for rebates or other incentives and/or disincentives in line with other City's policies and by-laws.
- i) To provide for waste infrastructure and assets.
- j) To provide for the development and maintenance of appropriate information systems;
- k) To ensure that all residents, organisations, businesses and other government departments receive waste management services from a legitimate, accredited waste management service provider according to the City's statutory obligation and prerogative.
- I) To define, design, create and/or facilitate appropriate mechanisms and identify responsibilities of all stakeholders that will reduce waste generation of all kinds.
- m) To standardise the different waste management service delivery mechanisms.
- n) To set waste management performance standards by the City.
- o) To inform the Integrated Waste Management Plan of the City based on waste minimisation and sound socio-economic and environmental principles.
- p) To provide an efficient waste management service as affordably as possible.
- q) To manage green house emissions from City's waste management activities.

4. STRATEGIC ALIGNMENT

4.1. Overarching Principles, Policies and Strategies

There are numerous guiding principles and policies that provide an integrated policy framework for the City of Cape Town to achieve avoidance and waste minimisation targets through an integrated waste management approach.

The key legislastion, principles and policies which define responsibilities are:

- a) Constitution, s.24: The right of everyone to an environment that is not harmful to their health or well-being and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.
 - Constitution Schedule 5B, and MSA provisions requiring local government to ensure provision of waste management services.
- b) National Environmental Management Act, 1998 (Act No. 107 of 1998) and National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
 - *"Cradle-to-grave"* extended producer responsibility of manufacturers and users
 - "*The-polluter-pays*" principle and responsibility of waste generators.
- c) Batho Pele Principles.
- d) Local Agenda 21 (LA21) is a voluntary process of local community consultation with the aim to create local policies and programs that work towards achieving sustainable development. It encompasses awareness raising, capacity building, community participation and the formation of partnerships.
- e) National Waste Management Strategy (2011).
- f) National Pricing Strategy for Waste Management (2016).
- g) National Policy in Thermal Treatment of General and Hazardous Waste (2009).
- h) National Policy for the Provision of Basic Refuse Removal Services to Indigent Households (2011).
- i) National Development Plan (2012).

4.2. The City's strategic focus areas

4.2.1. The Integrated Development Plan (IDP)

The policy is aligned to the following strategic focus areas and priorities enshrined in the IDP:

Strategic Focus Area 1- Opportunity City

Priority1- Positioning Cape Town as a forward looking, globally competitive business city

The creation of opportunities that stimulate sustainable economic growth, investment and job creation in the waste sector. This includes the provision of infrastructure for integrated waste management.

Priority 4: Resource efficiency and security (ODTP)

Optimise resource efficiency by implementing waste diversion programmes and mitigating the impacts of climate change through waste to energy and related projects and programmes.

SFA 3 - Caring City

Priority 6 - Excellence in basic service delivery

Provide effective and efficient integrated waste management services to improve living conditions and health, and promote individual and community welfare.

Priority 7 - Mainstreaming basic service delivery to informal settlements and backyard dwellers (ODTP)

Provide basic affordable and integrated waste management services to informal settlements and backyarders.

SFA 5 - Well Run City

Priority 11- Operational sustainability

Provide sustainable waste management services based on holistic cost-benefit considerations.

4.2.2. Environmental Management Strategy

The strategy's desired outcomes and principles, which are based on the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), underpins the basis of this policy.

a) Long term desired outcomes

- (i) That waste generation is minimised, recycling services are widely available, large scale composting of household organic and garden waste is in place, waste diversion is optimised, and the waste beneficiation economy is thriving;
- (ii) That the City understands and takes active steps to reduce environmental risk: and
- (iii) That all citizens know how to live in a more sustainable way, and make environmentally and socially responsible choices.

b) Directives by the City

(i) Resilience

- 1. Ensure that the City has a good understanding of environmental risks, particularly those risks associated with climate change, and develops appropriate plans and tools accordingly.
- 2. Ensure that climate change risk is taken into account in the management of natural resources and in the approval and implementation of developments.

(ii) Preventing, Minimising, and Mitigating Environmental Impacts

1. Take steps to reduce all forms of environmental degradation in both the City's own operations and in those of external stakeholders, including pollution of land, air, water, and the coast, through appropriate legislation, enforcement, infrastructural improvements, and environmental rehabilitation.

2. Take steps to ensure that the City is able to adequately deal with and treat both

solid and liquid waste, and in doing so, prevent, minimise or mitigate the impacts of these waste products on the natural environment.

- 3. Promote and pilot innovative approaches to service delivery and project implementation that aim to prevent, minimise or mitigate environmental impacts, and encourage the implementation of innovative approaches in the broader city context;
- 4. Adopt the "polluter pays" principle which states that those who produce pollution should bear the costs of managing it to prevent damage to human health or the environment.

(iii) Resource Efficiency

- 1. Promote the reduction of waste production across all sectors of society and the improvement of waste management, including the reuse of waste products and recycling.
- 2. Actively increase the City's own contribution to resource efficiency through the City's green procurement initiative.

(iv) Educated and Empowered Citizens

- 1. Prioritise environmental education, awareness, training, and communication as a key means of improving environmental quality in the city.
- 2. Make information available to all people on how to live, work and play in an environmentally friendly and sustainable manner.
- 3. Recognise at all times that individual accountability and responsibility of each citizen is dependent on an empowered and informed citizenry.
- 4. Enable citizens to engage with the City on an ongoing basis on ways to improve implementation of the City's environmental principles.
- 5. Lead by example in the implementation of resource efficient and environmentally sensitive technologies.

4.2.3. C40 Cities Climate Leadership Group

Sustainable Solid Waste Network, under the banner of the C40 Cities Climate Leadership Group was established to support cities in moving up the waste hierarchy by improving collection, recycling and disposal (e.g. managing landfills and landfill gas), while developing community projects for composting and recyclables management. The City as a signatory to C40 must put in place solid waste infrastructure, systems and processes that will reduce and mitigate the impacts of climate change from waste generation, treatment and disposal.

Solid waste disposal and management activities generate emissions of Green House Gases (GHGs) such as Methane (CH4), carbon dioxide (CO₂), nitrous oxide (N₂O) and carbon (C).

Good Practice approaches adopted by C40 Cities Climate Leadership Group on waste management are the following:

- a) expand sanitary waste disposal and landfill management;
- b) develop infrastructure for waste utilisation;
- c) integrate waste management and social inclusion;
- d) promote innovation in waste collection services;
- e) support development of market economy for waste recycling;
- f) use digital mapping to manage solid waste; and
- g) ensure and implement integrated waste management systems.

5. REGULATORY CONTEXT

Various legislative changes have taken place since 2000 due to global agreement on the impacts of waste on human and environmental health. The national government has introduced legislation related to holistic, integrated waste management through the NEMWA.

NEMWA purports to reform the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development; to provide for institutional arrangements and planning matters; to provide for national norms and standards for regulating the management of waste by all spheres of government; to provide for specific waste management measures; to provide for the licensing and control of waste management activities; to provide for the remediation of contaminated land; to provide for the national waste information system; to provide for compliance and enforcement; and to provide for matters connected therewith (See the preamble to NEMWA).

The legislative framework for the City of Cape Town's IWM Policy, which includes National and Provincial legislation, policies, and protocols to which South Africa is a signatory, is detailed in this section. In addition, there are various City-related regulatory and policy documents that contextualize the scope and principles of this policy and serve to enable the management of waste in an integrated, sustainable, equitable and responsible manner in order to maintain a safe and a healthy environment.

Legislation, government policy, national strategies and protocols, and the City's institutional and regulatory framework have a direct bearing on the sustainable, affordable and equitable provision of waste services in Cape Town. This includes, but is not restricted to:

5.1. National Legislation

The key legislation that provides a framework for the Integrated Waste Management Policy is indicated below:

- a) The Constitution of the Republic of South Africa, 1996 (s24 Right to an environment not harmful to health or well-being)
- b) The National Environmental Management Act, 1998 (Act No. 107 of 1998)
- c) The Environment Conservation Act, 1989 (Act No. 73 of 1989)
- d) The National Water Act, 1998 (Act No. 36 of 1998)
- e) The Hazardous Substances Act, 1973 (Act No. 15 of 1973) and Regulations
- f) The National Health Act, 2003 (Act No. 61 of 2003)
- g) The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and Regulations
- h) The Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000)
- i) The Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998)
- j) The Local Government: Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
- k) National Road Traffic Act, 1996 (Act No. 93 of 1996)
- I) The National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
- m) The National Environmental Management: Waste Amendment Act, 2014 (Act No. 26 of 2014)
- n) The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
- o) Second-Hand Goods Act, 2009 (Act No. 6 of 2009)

5.2. Provincial Legislation and Policies

- a) Western Cape Health Care Waste Management Act, 2007 (Act No. 7 of 2007) includes responsibilities regarding health care waste management
- b) Hazardous Waste Management Plan (DEA&DP) (2006)
- c) Western Cape 2nd generation Integrated Waste Mangement Plan (2017)
- d) Provincial Waste Information System
- e) OneCape2040 (2013)
- f) Western Cape Government: Western Cape Green Economy Strategy Framework (2013)
- g) Western Cape Government: Provincial Strategic Plan (2014-2019)

5.3. City By-laws and policies

- a) Integrated Waste Management By-law, 2009, as amended
- b) Environmental Health By-law, 2003
- c) Streets, Public Places and the Prevention of Noise Nuisances By-law, 2007
- d) Air Quality Management By-law, 2016
- e) Treated Effluent By-law, 2010 as amended
- f) Wastewater and Industrial Effluent By-law, 2013
- g) The Integrated Metropolitan Environmental Policy City of Cape Town: Integrated Waste Management Policy

- h) Economic Growth Strategy
- i) EPWP Policy
- j) Air Quality Management Policy
- k) Asset Management Policy
- I) Supply Chain Management Policy

6. POLICY PARAMETERS

The IWM Policy enables the City to ensure and regulate the provision of waste management services, either through internal or departmental services, or external service mechanisms, where the City has to act as a service authority in terms of the MSA, to execute its Constitutional mandate. This policy applies within the jurisdiction of the City in relation to:

- a) The management and minimisation of waste that will be collected, streamed, diverted, processed, treated and/or recycled;
- b) The management of waste that will be disposed of at a licensed, regulated landfill site inside the City's boundaries or any other waste management facility under its direct control;
- c) All individuals residing or visiting the City, and entities doing business or providing any form of private, public or community service requiring waste management services;
- d) All service providers providing waste management services, including recycling related services in the waste management industry;
- e) The management and regulation of all waste that may include liquid or fluid wastes, which are generated inside the City's boundaries, with special provisions for the handling, processing, treatment and disposal of hazardous waste, as well as waste generated by the health services industry (including veterinary services);
- f) The regulation of waste crossing the City's boundaries to ensure proper management, recycling and control of all types of waste;
- g) The disposal of treated sewage sludge of an acceptable quality that will minimize impact on the environment, as determined by separate guidelines from time-to-time; and
- h) The provision of financial resources and assets by the City to provide waste management services.

The management of waste originating from sanitation systems and effluent, excluding treated sewerage sludge, is regulated under separate legislation and policies.

Annexure A indicates waste classes and categories regulated through this policy.

7. ROLE PLAYERS AND STAKEHOLDERS

- 7.1. The following role players and stakeholders play a vital role in the provision of waste management services:
- 7.1.1. Role Player's responsibilities

a) The City's prerogative as the service authority

- (i) It is the City's duty to ensure that a Waste Management Service, consisting of *"refuse removal, refuse dumps and solid waste disposal"*, is provided in the City, and per the requirements of the Constitution of Republic of South Africa Act, 1996.
- (ii) The selection of a suitable, equitable and sustainable service delivery mechanism for waste management services is, therefore, the City's duty and prerogative as the service authority and regulator within the municipal boundary, in alignment with all applicable statutory mechanisms.

b) The City as the regulatory authority

- (i) The City is the *de facto* Service Authority for waste management services at the local government level.
- (ii) The provision of a waste management service is, thus, subject to statutory requirements and conditions.
- (iii) The waste management service provision includes specialized collection, processing or treatment by hand or machines, disposal services, the operation of vehicles and machines used for waste management, the establishment of infrastructure and equipment by external entities or individuals.
- (iv) The provision of all waste management services by internal or external entities within, or that crosses the City's boundaries is regulated through applicable legislation read in conjunction with this policy.

c) Intergovernmental Roles and Responsibilities

- (i) The City recognises that it has a responsibility to abide by legislation and policies that are introduced by National and Provincial Departments.
- (ii) In this regard, the City acknowledges the regulatory oversight of these departments that must be exercised in terms of legislative compliance as well as the allocation of funds in aid of achieving National and Provincial objectives at the local government level.
- (iii) Conversely, these Departments have a responsibility to ensure that timeous communication, engagement and the intergovernmental transfer of funds enables the City to execute its duties and obligations.

d) Waste Management Officer's roles and responsibilities

The NEMWA refers to the role of the WMO as coordinator of waste activities in his/her area of jurisdiction and awards the powers to a municipality to manage various aspects of waste. The WMO will therefore be responsible for coordination of all functions and powers assigned by the Act to the respective authority, including the following

- (i) Policy development and by-laws
- (ii) Financial Planning and Management
- (iii) Integrated Waste Management Planning and Reporting
- (iv) Infrastructure Development
- (v) Waste Services Provision Arrangements
- (vi) Performance Management and Regulatory Capacity
- (vii) Health and Hygiene Promotion
- (viii) Asset Management and Legal Matters
- (ix) Service Authority Structural and Organisational Issues (Capacity Building)

7.1.2. Stakeholder Responsibilities

a) General waste management and minimisation responsibilities of residents, visitors or entities inside the City's boundaries include the following:

- (i) All City stakeholders must be aware of, and accept their waste minimisation responsibilities by preventing or reducing waste where possible, and separating order to reduce waste to landfill.
- (ii) Their duties include applying the principles of "prevention-before-wastegeneration", "waste separation, streaming and diversion", and "cradle-to-cradle", which are fundamental to the successful implementation of waste minimisation in the City.
- (iii) All entities and individuals wishing to provide **commercial waste minimisation and recycling services** inside the City boundaries must be accredited by the City to operate in the City's boundaries;
- (iv) Accredited service providers may provide waste management services only after the City has exercised its duty and prerogatives in terms of the enabling legislation, and must have a legitimate standing to operate a sustainable and responsible waste management business, provided that it is done in accordance with the principles and standards set out in this policy, and in accordance with the applicable legislation and regulations.
- (v) External accredited waste management entities that have not been contracted by the City to provide services on its behalf, i.e. where the City has elected not to provide a service, must recover their costs according to their own terms of contract with their customers.
- (vi) All property owners, residents and business entities must apply for waste management services with the City and engage with the Solid Waste Management Department to ensure they understand their responsibilities associated with

integrated waste management and the cross-impacts of their activities on other stakeholders and the environment.

- (vii) All stakeholders must ensure they have a valid contract with an accredited service provider for waste collection and disposal if the City's services are not used. Residents and commercial businesses must have a contract with the City unless otherwise determined by the Waste Management Officer. The application procedures and requirements are detailed in the Waste collection and disposal SOP's respectively.
- (viii) All commercial and industrial entities must complete a "Waste Assessment" form, as per **Annexure C**, that will assist the City with its long term planning.
- (ix) Specific entities that require a business license from the City in terms of the Businesses Act, 1991 (Act No. 71 of 1991), must submit a waste management and recycling plan for approval by the City Health Department in terms of the City's Integrated Waste Management By-law, 2009 requirements.
- (x) Industrial and health care entities must have a contract with a legitimate private sector accredited service provider able to provide a service according to the nature of the waste that must be collected, and/or treated, and/or recycled, and/or disposed.
- (xi) Health care risk waste generators, transporters and facility operators must have a valid permit issued by the DEA&DP.
- (xii) Property owners, tenants, traders or businesses may only use the approved containers provided by the City for their own use at the site and for the purpose it has been provided, and may apply for additional approved containers or enhanced services at additional cost.
- (xiii) Property owners of vacant land and occupants of occupied property are responsible for maintaining cleanliness and hygiene standards inside the boundaries of the property in terms of the City's applicable by-laws.
- (xiv) Property owners and/or developers of land and buildings must provide for waste management infrastructure according to the City's guidelines and any applicable land use approval conditions, and must submit a waste management plan as part of the City's plans approval process.

b) Roles of Academia and Research Institutions

- (i) To conduct research on best practices regarding waste minimisation, treatment and disposal; and to provide input in a manner prescribed by the Waste Management Officer.
- (ii) Participate in City, industry and project/programme funders engagements.
- (iii) To research new and innovative waste management processes, to develop industry standards, and guidance on necessary skills, expertise and technical information required for business improvement.

7.2. Different Waste Management Service Mechanisms

There are a number of mechanisms through which the City ensures the provision and integration of waste management services according to this policy.

They are either through internal mechanisms (City department) or external mechanisms (Municipal Service Partnerships – MSP), which the City, as a service authority, manages and regulates. These mechanisms include the following options:

a) City-provided or managed services at tariffs set by the Council:

- (i) A waste management service that is provided through an internal department according to the Council's system of delegations;
- (ii) A waste management service that is provided via a community partnership contract or another entity (private business, CBO or NGO) that is contracted via the City's competitive bidding process to provide a service on behalf of the City at a sustainable cost to an end-user, with outcomes managed by the City in terms of the principles and standards of the policy read in conjunction with the contract;
- (iii) A waste management service is provided through a public-private partnership (PPP) on behalf of the City on an externally contracted basis to an end-user, and outcomes in terms of a contract and service standards are managed by the City.

b) External service mechanisms

This refers to instances where the City is the service authority and regulator of the minimum service standards via this policy, but does not control the cost to the consumer. These mechanisms are prescribed as follows:

- (i) Where another entity (private or external business) provides a specialised service, equipment and facilities to an end-user per contract and at a cost set by the entity, such costs shall be payable to the external service provider, while outcomes are monitored/regulated by the City in terms of the principles and standards of this policy and the provisions of the City's by-laws; and
- (ii) Where a service is provided through an intergovernmental partnership subject to cost recovery as provided for in legislation and per monitoring and management arrangements that will be determined contractually, from time-totime.

7.3. Integration of Waste Management Services

a) Cross-cutting Functions among the City's Departments

(i) Waste management functions are provided by various departments, who share

co-responsibility for successful outcomes. As a result, not all waste management functions related to the maintenance or cleaning of City infrastructure or the environment are the responsibility of the City's Solid Waste Management Department. A common responsibility of all internal departments is, to individually comply with national, provincial or City waste minimisation targets, in a cost effective manner, with guidance and assistance received from the Solid Waste Department.

- (ii) All waste that is cleared and cleaned, which may be contaminated by pollutants or pathogens, must be treated as "hazardous waste" for treatment and disposal purposes.
- (iii) Cross-cutting waste management functions which relate to City infrastructure and facilities, cleaned and maintained by departments as per the delegated responsibility, may change from time-to-time due to internal organisational restructuring and functional delegations.
- (iv) The City's Solid Waste Management Department may provide waste management services to internal departments or directorates via service level agreements (SLA's) to recover costs associated with waste management per the MFMA requirements.

b) Waste Management Services provided to other Government Institutions

- (i) All other government departments and state-owned entities that own developed property and vacant land, or operate from leased premises in the City's boundaries, are responsible for the maintenance and cleanliness of these properties. These entities and departments must have and are liable for payment of the waste management services provided to/on their properties.
- (ii) The cleaning of any public land declared and operated by another government department or state-owned entity, is the responsibility of that department or entity. Cleaning must be done to meet the City's minimum standards of cleanliness and fire safety.
- (iii) The City will provide collection and cleansing services to/on non-City property, or on land not normally serviced by the City on a contracted basis, at a tariff set out in the City's Tariff Policy. Alternately, a private accredited contractor may provide the service according to its own terms of contract.

c) Waste management and minimisation in City Improvement Districts (CID's)

(i) The City Improvement Districts are Non Profit Companies that are initiated, driven, managed and funded by the local community within a predetermined boundary and are approved by Council.

- (ii) CIDs provide only supplementary municipal services including 4 focus areas which are Public safety, Cleaning relating to refuse removal, illegal dumping, recycling as well as, Environmental and Social responsibility.
- (iii) All CIDs are subject to the City's IWM Policy as the Solid Waste Department has to review the component of the CIDs' Business Plan relating to the cleaning function as the City retains oversight and has to ensure that the cleaning functions performed by the CIDs are aligned with the City's IDP and Waste Management Policy and processes.

d) Waste Management Services provided at Public Events and Places

Waste management services are required at public places, amenities and facilities that are used by residents and non-residents (e.g. visitors and tourists), and at events that will attract large numbers of the general public.

- (i) Planning for all events hosted in the City must include a provision for waste management services and payment for these services if City services are to be used. This includes events that are planned and organized by the City, by a government department or a committee sponsored by such a department, by any other person, body or institution, or by a private entity.
- (ii) Any person who intends to generate event waste shall contract with an accredited service provider for the collection and disposal of such waste to a licenced waste disposal facility and provide proof of this to the City as part of its integrated waste management plan.
- (iii) The event organiser must submit a waste management plan which includes the cleaning, separation and recycling, collection, and disposal of waste that is generated at such events. A budgetary allowance must therefore be made for this purpose by event organisers.
- (iv) The event organiser must include in the waste management plan measures pertaining to the control of litter in at least a **100m buffer** outside the venue, management of informal traders and management of waste generated by people travelling to and from the event.
- (v) If the City provides any or all of the waste management services at such an event, event organisers will be billed accordingly as per the City's tariff policy.
- (vi) The waste management services the City offers to event organisers include cleansing services, hire and servicing of 2401 refuse bins, and/or the hire of recycling bins from the City, to be serviced by the event organiser's accredited recycling service provider.

- (vii) Should a person fail or neglect to obtain services of an accredited service provider prior to the event in question, or fail to provide the City with the integrated waste management plan or should there be waste left at the area where the event has been held or the surrounding area as a result of the event, the waste management officer may arrange for the collection, clean-up, recycling and disposal of the waste.
- (viii) The cost for the collection, clean-up, recycling and disposal of the waste shall be payable by the event organiser and may be recovered from the deposit paid or in terms of the City's Credit Control and Debt Collection By-law.
- (ix) If an event organiser neglects to obtain waste management services, the City may bill the event organiser for any expenses incurred for cleansing, collection, waste minimisation and disposal services.

e) Waste from other Municipalities, Provinces and Countries

- It is the City's policy to regulate the trans-boundary or trans-border movement of waste, in keeping with National legislation, policy and international conventions, either from another municipality or province to the City, or from another country for disposal at any landfill site in the City or regulated by the City, irrespective of ownership or management responsibility.
- 2) If there is sound rationale for allowing trans or cross-border waste to be landfilled in the City, it may only happen if the following conditions are met;
 - (i) That a written application is made to the Waste Management Officer giving details of waste to be disposed;
 - (ii) That such application meets the City's requirements for waste disposal and is approved;
 - (iii) That all relevant permits have been issued including additional requirements by other government authorities such as the Basel Convention on the Transboundary Movement of Hazardous Waste and the Intergovernmental Relations Framework Act, 2005 (Act No. 13 of 2005) where applicable.
 - (iv) That the necessary financial agreements have been signed, and
 - (v) Tariffs are charged as determined by the City's tariff policy.

8. POLICY DIRECTIVES

The City is responsible for the provision of waste management service within its geographic area of jurisdiction. Property owners, or organisations, business entities or individuals who occupy premises, are responsible for maintaining cleanliness and hygiene standards on their premises (on-site inside property boundaries) in keeping with the norms determined by applicable legislation. All stakeholders may contract accredited on-site waste management service providers at their own expense. The City reserves the right to clean

waste and overgrowth that accumulates on such land at the owner's expense at the tariffs determined in the City's Tariff policy.

The City's own services are clustered as per the following categories and the suite of services required for managing waste through an internal service mechanism:

- a) Waste minimisation services, this includes the facilitation or implementation of various waste minimisation programmes, in conjunction with all stakeholders in Cape Town, such as separation of recyclables at source, either door to door or via drop-off sites or Materials Recovery Facilities (MRFs), for onward processing by the recycling industry, crushing of clean builder's rubble and organic waste composting.
- b) General waste collection services, including the transportation of waste to a transfer station, MRF or drop-off site for recyclables, a special processing/treatment plant, or a disposal facility.
- c) **Cleansing**, this encompasses a wide range of cleaning services for all public spaces and streets under the City's jurisdiction. This includes litter bin provision and servicing, street sweeping, litter picking, the clearing of illegal dumping and animal carcasses, beach cleaning, and the cleaning of industrial pollution, waste and debris generated by natural disasters and processes.
- d) **Disposal services**, which include the maintenance and operation of special processing facilities, drop-offs, waste transfer stations, MRF's and landfill sites.
- e) **Technical support services:** The City operates a fleet of vehicles that are specially equipped for the task of waste collection, cleaning and transportation of waste to landfill sites. A variety of support infrastructure, such as depots and workshops, is required and must be provided to house and support the different functions.
- f) **Resource provision, funding and performance management**, includes financial resources and asset management by the finance and commercial section of the Solid Waste department.
- g) General management, contract management, customer relations, information management, administrative, by-law enforcement and planning support: Various services are provided to manage and provide additional support for the operational services as well as to give effect to the City's waste management policy, by-law and strategy as guided by the National and Provincial regulatory framework.

The City has a prerogative regarding the choice of service mechanism. This includes, approved containers and all aspects of service provision. Its prerogative is in line with its obligation to assess an appropriate service mechanism in terms of section 77 of the MSA. It further has a prerogative to set tariffs via its Tariff Policy for its waste management services. An assessment with regard to waste management of all the stipulated criteria in terms of the MSA was carried out in 2010/2012.

This included a review of the organisational and community benefits, which were consulted in the public realm. The results, objections and recommendations with regard

to alternative service mechanisms was adopted by Council.

8.1. Waste Minimisation

Waste minimisation forms the core of the National Environmental Management: Waste Act, 2008, (NEMWA) and the National Waste Management Strategy, 2012 (NWMS), which aim to ensure that the negative health and environmental impacts of waste can be minimised, landfill airspace can be optimized, and waste beneficiation can be realised. This requirement for waste minimisation is not a "business-as-usual" approach, as it requires responsible and proactive participation by all stakeholders.

The City of Cape Town (City) commits to pursue, establish, facilitate and communicate waste minimisation mechanisms, initiatives, and partnerships proactively, and to facilitate participation from the public, commerce and industry. Applied waste minimisation primarily promotes waste avoidance, and also encourages and implements strategies aimed at increasing the separation at source, re-use, recycling and recovery of waste materials which result in waste diversion from landfill sites.

Multi stakeholder participation and engagement, shared responsibility and partnerships, and a commitment to cleaner production and sustainable consumption, are key to the success of waste minimisation. This approach requires resources and infrastructure contributions from commerce, industry and the City, including changed production processes to reduce the amount of waste generated.

Changes are required in the production, marketing, packaging, selling and consumption stages of product or service lifecycles, requiring an intentional and comprehensive effort by all stakeholders to ensure that waste and its impacts can be reduced through waste minimisation.

The City's role in waste minimisation includes the facilitation or implementation of various waste minimisation programmes such as separation of recyclables at source, either door to door or via drop-off sites or Materials Recovery Facilities (MRFs), for onward processing by the recycling industry, crushing of clean builder's rubble and organic waste composting.

8.1.1. Waste minimisation and diversion principles

The following principles, as applied to waste minimisation and diversion, form the basis of the approach to waste minimisation in this policy, based on pragmatic and sustainable cost-benefit considerations, balanced by expenditure priorities, while striving to achieve National, Provincial and City waste diversion targets in accordance with spatial and development strategies:

a) The "waste avoidance, or prevention before waste generation" principle promotes the avoidance of waste above other waste management options; City of Cape Town: Integrated Waste Management Policy 30

- b) The "cradle-to-cradle" principle is an approach to product and system design, that models human industry on nature's processes, viewing materials as nutrients for the same or new cycles;
- c) The "circular economy" approach is embraced, which can be achieved through long-lasting design of products, maintenance, repair, reuse, remanufacturing, refurbishing, and closed recycling loops;
- d) The principle of "separation at source, streaming and diversion" makes provision for waste streams to be separated where possible;
- e) The "producer responsibility" principle maintains that, because producers have the greatest control over product design and marketing, they therefore have the greatest ability and responsibility to reduce the toxicity and waste generated by their products;
- f) The 80/20 "Pareto Principle" acknowledges that not all waste can be avoided or diverted from landfill, resulting in a prioritisation of waste avoidance and diversion systems which optimise the return on effort and expenditure needed for minimisation initiatives.

8.1.2. General stakeholder roles with respect to waste minimization

- a) Waste generators—
 - (i) Be aware of, and accept their waste minimisation responsibilities by reducing, preventing and separating waste that is being generated, to reduce the quantities disposed to the landfills. This entails managing the waste responsibly at the point of generation, separating waste and placing this in separate containers for diverting it either to a drop-off, transfer, processing or treatment facility where possible;
 - (ii) Change mindsets and behavioural patterns to reduce waste and its impacts by avoiding waste where possible, not littering or dumping waste illegally, and by practicing the separation at source, reuse, recycling and diversion of recyclables from landfill.
- b) The City, business, industry and PRO's joint responsibilities for framework activities to enable and support waste minimization-
 - (i) Change procurement policies and practices in large organisations, including the City, to facilitate environmentally-aware procurement, stimulate markets for recyclable and recycled products (e.g. targets for recycled content), and consider a product's lifecycle when procuring it;

- (ii) Encouraging and incentivising waste separation, streaming and diversion practices by conducting awareness and education campaigns to disseminate information regarding waste minimisation and diversion, and using incentive systems where necessary;
- (iii) Creating or attracting investment in infrastructure which enables waste to be diverted from landfill sites;
- (iv) Developing infrastructure for sorting and processing of recyclable waste for reuse/recycling.
- c) Business, industry and PRO's—
 - (i) It is the responsibility of industry and the PRO's to develop markets for recycled materials and products;
 - (ii) "Extended Producer Responsibility" (EPR) programmes implemented by PRO's and producers of products (manufacturers) should include but not be limited to recycling programmes; or take-back programmes for used products with the purpose of diverting them through re-purposing or recycling initiatives.
- d) City of Cape Town-
 - (i) to enable, regulate and implement waste minimisation in accordance with its service delivery mandates, its IWMP and National, Provincial and City targets over time;
 - (ii) to draw up an internal waste minimisation strategy for implementation by City departments, aimed at reducing the tonnages of waste, and its impacts on natural resources and the environment;
 - (iii) to play an enabling and facilitation role to provide an environment where all stakeholders are able to minimise their waste, by establishing relevant partnerships and networks and by creating a database of all accredited service providers in Cape Town who provide waste minimisation-related services and make it easily accessible to the public.
 - (iv) to play a co-operative role with the relevant national and provincial departments to ensure that activities can be streamlined to minimise duplication and give effect to waste minimisation, thus contributing to the national imperatives of minimizing resource use and the environmental impacts of waste;

- (v) to engage with business and industry, either through representative bodies, or with individual organisations to facilitate the provision of infrastructure and services, through private, industry-specific and public-private initiatives that will enable and ensure waste minimisation;
- (vi) to conduct awareness and education campaigns to disseminate information regarding waste diversion, minimisation and recycling.

8.1.3. Waste Avoidance

All waste generators, including product designers and manufacturers, retailers and consumers are required to implement waste avoidance where possible and it should be a consideration throughout the product value chain.

Waste avoidance extends backwards in the production, consumption and waste generation cycle, and will require the co-operation and additional effort of the manufacturers and producers in terms of *"Cleaner Production and Sustainable Consumption"*, *"Circular Economy"* and *"Extended Producer Responsibility"* (EPR) initiatives, and participation by the consumers of goods as part of individual waste minimization efforts.

City stakeholders' requirements in terms of waste avoidance include:

- a) All waste generators must avoid generating waste as far as possible;
- b) At the product design phase, manufacturers are required to improve product and packaging designs to reduce resource consumption and ensure waste avoidance, by:
 - Carrying out research and development work to compare and investigate the demand placed by various products on raw material and other resources and their impact on the environment as a whole;
 - Potentially using locally available waste resources from other industry stakeholders/businesses, through an industrial symbiosis or waste exchange relationship or programme. These materials can substitute as alternate process input (raw) materials;
 - (iii) Using recyclable material as an alternate manufacturing raw material, should the product purpose and suitability make allowance for it;
 - (iv) Taking the end of product life into consideration when designing a product or packaging, e.g.:
 - 1. Could it have re-use purposes or be refurbished in its current designed state, or used as a raw material for a secondary or different product?

- 2. Is it recycled in South Africa or abroad? If not, an alternate recyclable material type should be considered.
- c) Brand owners and retailers are responsible to change their marketing and sales approaches to influence consumer perceptions and purchasing behaviour to avoid waste.
- d) Consumers are required to exercise a waste avoidance mindset when making purchasing decisions, so that the products and packaging produced from their purchases generate as little waste as possible.

8.1.4. Alternative waste diversion services for different community needs

- a) Different communities have different needs and the City recognises that, if possible, there should be alternatives that are best available to suit various waste minimisation needs to promote community benefits.
- b) These alternatives must follow the general principles for waste diversion and minimisation.

8.1.5. Separation of waste at source and its collection for diversion from landfill

Separation of waste streams at source, and the appropriate transportation of these recyclable waste streams for diversion from landfill, is required as per National legislative requirements to increase waste minimization. Further, the separation at source, and transportation of this waste for diversion, enables income generation and job creation opportunities and ensures that maximum benefit is derived from the value of the waste.

The City of Cape Town enables separation at source by providing kerbside collection services and/or drop-off sites for residents. These services are required in terms of the National legislative requirements for municipalities to provide an enabling environment for separation of waste streams for diversion. Drop-off sites serve residential areas where a separate recycling collection service is currently not offered by the City.

Requirements for separation at source at informal settlements:

- a) Waste sorting should preferably occur at source by each household in informal settlements and developing communities.
- b) Where this is not possible due to practical considerations (e.g. space restrictions, etc.) the waste can be dropped off and sorted at a City drop-off site or community drop-off sites or buy back centre, as detailed below, on condition that a first level of sorting between wet and dry waste has been carried out by each household.

Requirements relating to separation at source in formal settlements and businesses:

- a) Waste generators, such as occupants of dwellings, managers of facilities or business entities or industrial generators must ensure that recyclable waste is separated prior to collection;
- b) Separated waste may not be mixed with waste that is destined to be landfilled;
- c) The provision of a kerbside recycling collection service by the City or its contracted accredited service providers will be per the directive of City and subject to budget provisions.
- Only in areas where the City does not provide a kerbside recycling collection service, may private accredited recycling service providers contract with residents, for the collection of sorted recyclables, as per arrangements between the resident and the service provider;
- e) Residents must ensure that contained recyclable waste are not put out for collection on the kerbside until the day of recyclable collection in order to avoid practices that may lead to littering and further cost to the City. Please note that this might not be the same day as general waste collection;
- f) Should residents be making use of a private accredited waste service provider for recyclables collection, the placement and collection of the separated recyclables should not interfere with the municipal waste collection services in the area;
- g) Special provisions for residential or business cluster developments and flat complexes:
 - (i) Such complexes have the opportunity to apply for a reduction in their number of 240l general waste wheelie bins serviced by the City, with the accompanying monthly cost savings associated, up to a certain threshold, enabling savings which can fund recycling collection services;
 - (ii) Further to this, such residential or business complexes may apply for consideration by the Waste Management Officer to establish a "Waste Minimisation Club", which enables a further reduction of 240l wheelie bins serviced by the City, to enable additional savings to be allocated to recycling collection services;
 - (iii) A Waste Minimisation Club is subject to special requirements and tariffs and must apply to the City for a special dispensation in terms of an "Enhanced Service", together with the submission of a waste management plan for approval.
- h) Developers of high density buildings or complexes must ensure that adequate waste

management and recycling facilities (e.g. waste rooms, containers) are included in plans submitted to the City for approval;

- i) Commercial or industrial waste generators must transport their own recyclables or have these collected at own cost by an accredited service provider, to an appropriate recycling facility;
- i) Alternatively, on-site recycling facilities may be established and managed on behalf of businesses by accredited private waste management specialists;
- k) It is acknowledged that waste pickers also collect recyclable waste from residential properties, and this should be managed in such a way as to minimize the litter generated, as well as any other risks to the area.

8.1.6 Drop-off sites and buy back centres

Drop-off sites and buy back centres are key public-facing facilities for gathering and sorting of various waste streams for beneficiation.

To supplement its kerbside recycling services, the City provides free dedicated, registered drop-off sites for residents to drop-off their separated recyclable material. These sites are also an important avenue for bulky recyclable wastes types, such as garden waste, builders' rubble and certain garage wastes, among others, to be dropped off for beneficiation where possible.

In addition, private stakeholders such as local entrepreneurs, businesses, industry or civic organisations (CBO's, NGO's, churches, academia or schools) manage private drop off facilities and/or buy-back centers (BBC's) across Cape Town, which can be utilized by residents or commercial waste generators. While drop-off sites facilitate the dropping off of sorted waste streams free of charge, BBC's offer a payment option for various types of recyclables which are economically viable for that BBC to purchase. BBC's may offer cash, credit or goods (swop-shop model) as a payment option for recyclables.

Requirements related to drop-off sites or BBC's include:

- a) The City will ensure the provision of waste diversion infrastructure, including drop-off sites, to enable diversion of waste from landfill, subject to affordability;
- b) The occupant of a private dwelling may transport streamed waste and deposit the different waste streams at registered City drop-off (i.e. waste diversion) sites;
- c) Alternatively, residents or businesses may deposit their recyclables at accredited private drop-off sites or BBC's; City of Cape Town: Integrated Waste Management Policy 36

- d) Contracted accredited recycling service providers (usually SMME's) sort and sell recyclables dropped off at the City of Cape Town's drop-off sites.
- e) Waste generators must ensure that recyclable waste is separated prior to dropping off the waste at the relevant drop-off or buy back centre;
- f) Waste generators are required to take note of and adhere to the site conditions, as well as the types of waste which are accepted by specific drop-off sites;
- g) An entity or person managing or wishing to start a drop-off site or BBC is required to:
 - Secure own available land, with appropriate zoning requirements for the specific facility envisioned (BBC's may require industrial or similar zoning, whereas the zoning requirements for a drop-off site are less onerous);
 - (ii) Ensure that the facility location is accessible to the proposed customers who will be bringing their recyclable waste;
 - (iii) Apply to the City to become an accredited waste management service provider in terms of the City's Integrated Waste Management Bylaw, 2009 and comply with all relevant National legislation, such as the Second-Hand Goods Act,2009 and NEMWA and its regulations;
 - (iv)Investigate different business models for BBC's, for example cash, credit or goods (swop-shop model) as payment options and decide on appropriate model;
 - (v) Ensure appropriate staffing and equipment for the relevant activities onsite.

8.1.7 Handling, baling, chipping, crushing, further processing and/or treatment of waste for beneficiation

Before waste can be beneficiated in the economy, the appropriate baling, chipping or crushing of waste streams is required in order to improve the logistical value chain, with one of the key aims being to densify the waste to ensure more efficient transport and increase the economic viability of the value chain.

The City builds material recovery facilities where sorting and baling of recyclables can take place. Chipping of organic waste and crushing of builders' rubble also takes place at City drop-off sites, transfer stations and/or landfill sites. At City facilities, these operations are managed by contracted accredited waste service providers, who follow a competitive bidding process for providing the service. Similar operations are carried out in the private sector at locations they own and operate.

The above activities are usually followed by additional treatment or waste processing so that the waste streams can be used productively in the economy as resource streams. Examples of such treatment includes: composting (organics), anaerobic digestion (organics), melting (plastic, glass, metal, e-waste), granulating (plastics, fabrics), pelletising (plastics, organics), refining (oils and solvents), hydrogenation (oils and solvents) and further sorting, such as water flotation (e-waste, builders rubble).

The City provides a number of integrated waste management facilities as described in 8.4 below, some of which will include some of the activities above. However, the majority of these additional treatment or processing activities take place in the private sector.

Requirements for entities managing facilities for baling, chipping, crushing, processing or treatment of waste:

- a) A private entity or person managing or wishing to start a waste baling, chipping, crushing, processing or treatment facility is required to:
 - (i) Secure own available land, with an appropriate zoning requirements for the specific facility envisioned (such a facility may require industrial or similar zoning);
 - (ii) Ensure that the facility location is accessible to the appropriate suppliers of recyclable waste, as well as the customers who will be involved in its beneficiation;
 - (iii) Investigate and comply with the City's accreditation requirements as a minimum, any service provider who is operating a baling, chipping or crushing facility, as well as certain types of treatment or processing facilities for gain is required to apply to the City to become an accredited service provider;
 - (iv) Comply with all appropriate National legislation as relevant, such as City's Integrated Waste Management By-law, 2009, Second-Hand Goods Act, 2009 and NEMWA and its regulations;
 - (v) Ensure appropriate staffing and equipment for the appropriate activities, and suitable, reliable and viable markets for the end product produced by your facility.

8.1.8 Markets for Recycled Materials

- a) Recycling and the creation of a demand for products with post-consumer recycled contents lies largely with the private recycling industry, as well as PRO's and other industry bodies, who are required to develop markets and end uses for recycled goods and to drive this element of waste minimisation.
- b) This may include the creation or support of end use markets for processed or treated

recyclables, or the assistance of various recyclers in the value chain, such as processors of waste for recycling, and is usually done by means of financial instruments levied on material producers, to fund these Extended Producer Responsibility initiatives of industry.

- c) The City will however, advise, encourage and enable development initiatives that will stimulate economic and job-creation opportunities linked to the establishment of processing and recycling businesses in the City as part of the City of Cape Town's socio- economic development objectives.
- d) This assistance is limited to initiatives that are environmentally and economically sustainable by the owners of such businesses. In the event of a business, organisation and/or individual involved in recycling activities not being able to recycle and use recovered materials, they will be obliged to dispose of it at a licensed landfill site at their own cost.

8.1.9 Waste suitable for Diversion and Recycling

- a) By applying economic and practical criteria, it is accepted that not all waste can be cost effectively and efficiently streamed for diversion and economic recycling.
- b) The types of waste that should be targeted for these initiatives will be adjusted over a period of time, which is also affected by the changing local and global recycling markets.
- c) The recyclables that will be accepted by City recycling programmes or at City dropoff sites (as they are able to be beneficiated effectively at the time) are available from the City's service providers or listed on the City's Solid Waste Webpage.
- d) Private recycling collectors may also amend their recyclable lists from time to time, as determined by global and local markets.

8.1.10 Waste Exchange and Industrial Symbiosis: Recycling Vehicles for Business and Industrial Waste, among others

- a) The City implements and supports recognised industrial symbiosis and waste exchange initiatives aimed at ensuring that various stakeholders, specifically in the business and industrial sectors in Cape Town, and those who generate or process special and high value waste, have access to options for exchanging their waste with other industries or solution providers.
- b) As such, the City has developed, maintains and markets the Integrated Waste Exchange (IWEX) platform on its website as part of its IWM Plan.
- c) IWEX provides a passive, free electronic platform for waste exchange between users.
- d) In addition, the City partners with organisations in the development and implementation of systems such as the Western Cape Industrial Symbiosis Programme (WISP), which includes active facilitation of waste exchange synergies between waste producers and processors/users in various industrial sectors. The

programme is facilitated by WISP practitioners.

8.1.11 Sustainable/Green Procurement

- a) The City will in the future give consideration to the principle by which it will procure goods on a preferential basis from manufacturers, agents and providers that undertake to minimize waste during production and manufacturing, and who align their production and waste management policies with EPR guidelines.
- b) The principle of sustainable or green procurement also includes this inclusion of recycled products, or targets for recycled content, in procurement specifications where possible, and ensuring that a product's entire lifecycle is considered when procuring it, so as to stimulate markets for recyclable and recycled products in all aspects of the City's procurement framework.

8.2. Waste Collection Services

8.2.1. Classes of Waste and Service Categories

For the purpose of this policy, various classes and categories of waste have been defined in accordance with the National Waste Information Regulations (R.625) (2012), City's IWM Plan and the City's Tariff Policy. The descriptions and definitions for City-provided services are as per Annexure A.

8.2.2. Waste collection services provided or managed by the City

The City has a prerogative regarding the choice of service mechanism and service provision in line with its obligation to assess an appropriate service mechanism in terms of section77 of the MSA, and to set tariffs in terms of the City's Tariff Policy for its waste management services.

The City may provide the following services, equipment and infrastructure:

- a) Waste containers, and bags (per conditions set by the City's Tariff Policy);
- b) Residential and certain non-residential waste collection services (including special or bulky waste), and associated equipment and infrastructure;
- c) Special drop-off sites or facilities for recyclable waste materials as defined in Annexure D.
- d) Specialized waste collection and related services and infrastructure for industrial and hazardous waste are currently not provided by the City of Cape Town, but by private accredited waste service providers due to specialized facilities and infrastructure requirements not normally provided or maintained by the City.
- e) These services are aimed at the industrial and the health care service sectors (including veterinary services) that generate hazardous waste of various categories, which

requires special handling, transport and treatment before disposal.

- f) Industries have the responsibility to contract with an accredited service provider for the management of these waste streams.
- g) City services generally exclude nuclear waste, which is regulated by the Atomic Energy Commission via specific legislation.

8.2.3. Definition of Service Levels: Waste Collection

- a) The City's waste collection services are classified either as "non-residential" or "residential" status per the City's Tariff Policy.
- b) Further classification is based on the type of waste, i.e. whether it is of a general, uncontaminated nature, or is specialized by virtue of the environmental, health or safety hazard the waste presents, "residential" vs. "non-residential", and whether the area is considered to be "formal" or "informal" in terms of infrastructure and service provision.
- c) Non-standard services include special collection, more frequent collection, more than one bin, at events, streamed and separated wastes and bulky waste collection service.
- d) The City may review the frequency for residential waste collection and introduce changes if required by operational requirements or policy directives. Such changes will be implemented in line with the City's affordability, accessibility and efficiency criteria.

8.2.3.1. Standard Service Level for Waste Collection: Informal Settlements

- a) The standard service level for residential waste collection to informal settlements is aligned with the City's Indigent Policy.
- b) This is a minimum of once-a-week, door-to-door waste collection service provided to indigent families per household, according to a City-approved contract and using City-issued refuse bags (outside of the household door)
- c) This service includes the cleaning of the informal settlement and surrounding areas, and is thus considered a more holistic service.

8.2.3.2. Standard Service Level for Waste Collection: Formal Residential

- a) The standard service level for formal residences is a minimum of once-a-week kerbside waste collection service, either provided by the City or its contracted accredited service provider (container placed on the kerb)
- b) In this category, the formal residence, will be provided with a 240L wheelie bin, for those where geographic or other service constraints make this impractical, will be provided with an approved container, of a size and design to be determined by the City.
- c) The provision of 240L wheelie bins or approved containers to backyarders will be subject to City directive and budget provisions.

- d) The occupant must ensure that all residential waste that has been separated and cannot be recycled, is stored in the 240L wheelie bin.
- e) The bin may only be placed outside the property boundary for the weekly collection of the waste, prior to collection on the day of the scheduled collection in order to avoid practices that may lead to littering and further costs to the City.
- f) Waste that is collected by the City or its service provider becomes the property of the City when it is placed in approved containers provided by the City on the kerbside by the generator, therefore for collection.

8.2.3.3. Enhanced Service Levels for Waste Collection: Formal Residential

- a) Any deviation from the standard service will be deemed "enhanced".
- b) The City's Tariff Policy determines that for enhanced service levels involving residential refuse, additional approved containers may be requested and used, at additional cost to the owner.
- c) Approved waste minimisation clubs will also receive an enhanced service, based on criteria to be approved by the City.
- All applicants for an enhanced residential waste management service must apply to the City in writing and provide information relevant to the application as per Annexure C.

8.2.3.4. Special Services for Waste Collection

- a) The provision of special collection services will be determined on a case-by-case, needs basis according to specific requirements that must be set out in terms of a written request, and will be provided by the City subject to availability of equipment and resources at a tariff determined in the City's Tariff policy.
- b) The City will provide bins at public events according to the standards and costs set out in this policy, City's tarrif's policy and in line with the City's events policy.
- c) Alternatively, special collection services may be procured from accredited service providers in the private sector, at rates determined by the service provider, provided these accredited service providers comply with the City's minimum waste management criteria and standards and other relevant legislation.

8.2.3.5. In areas identified by the City of Cape Town as approximating baboon home ranges:

- a) The standard service level for formal residences is a once-a-week, kerbside waste collection service either provided by the City or its contracted accredited service provider.
- b) In these areas, all dwellings per erf, including backyard dwellings, will be provided with a double-lockable bin, of a size and design to be determined by the City.
- c) The occupant must ensure that all household waste that has been separated and
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cannot be recycled, is stored in the bin and is locked with two padlocks at all times. The waste truck can open the bin with the padlocks in place.

8.2.3.6. Provision of bulky waste collection service on ad hoc basis.

- a) The City will provide an adhoc bulky waste collection service as determined by the Director from time to time, subject to availability of equipment and resources at a tariff determined in the City's Tariff policy.
- b) Alternatively, bulky waste collection services may be procured directly from accredited service providers in the private sector, at rates determined by the service provider, provided these accredited service providers comply with the City's Policies and By-laws.

8.2.4. Internal versus External Waste Management Services

1) Non-residential, Commercial Waste Collection Services

Commercial waste collection services are partly provided by the City. The balance of commercial services is provided by the private sector. All commercial waste collection services must be provided according to the integrated waste management principles and standards of this policy.

2) Non-residential and Special Services through External Mechanisms

External accredited service providers may also provide waste management services within the municipal boundary as per this Policy. External entities or persons may provide the same suite of services as the City once the City has resolved not to provide these to a residential area, to commercial or non-commercial organisations or to industries. When a service provider has met all the statutory and City requirements, the City will accredit the service provider through an administrative process as determined by this Integrated Waste Management Policy.

- a) The minimum service level for collections by external entities is once per week.
- b) All commercial, industrial and health care entities requiring a service, must apply to the City irrespective of who the accredited service provider will be.
- c) All entities must provide the City with waste management information as per the City's Integrated Waste Management By-law, 2009.
- d) By implication, all remaining non-residential entities (i.e. commercial, health care services and industries) that are not serviced by the City must be serviced by external waste management entities according to a valid contract between a property owner, business owner or a tenant, and an external accredited service provider. This is especially relevant where special classes of waste must be

managed.

- e) If a property or business owner or a tenant cannot provide proof of a valid waste management contract, the City will ensure that waste management services are provided at the owner or tenant's expense.
- f) The City may introduce tariffs and service standards for informal businesses operating within or outside of the City's approved demarcated areas of trading.

3) Waste Management Partnerships managed by the City

- a) The City envisages various types of waste management partnerships with other entities which support national or provincial initiatives, or where it is not viable for the City to provide a waste management service.
- b) The City will retain the responsibility of service delivery outcomes defined by the contract unless otherwise agreed, and for enforcing the policy standards.
- c) This is also aimed at enabling local area economic development, small, medium and micro enterprise (SMME) stimulation and job creation.
- d) Waste management partnerships could include, but are not exclusive to:
 - (i) National, Provincial or regional partnership arrangements relating to the location and provision of disposal infrastructure and services that will achieve long-term environmental sustainability in the National or Provincial interest;
 - (ii) Partnerships with a community in terms of Expanded Public Works Programme (EPWP) criteria and objectives;
 - (iii) Partnerships with other entities that meet pre-determined economic criteria and the requirements of the City's Procurement Policy, which will be formalised through a contract;
 - (iv) Voluntary industry partnerships;
 - (v) Partnerships with City-approved City Improvement Districts (CID's), where the CID may elect to utilize the City's services for its top-up services, and which is subject to additional contractual obligations that exceed minimum cleanliness set out in clause 8.3 and **ANNEXURE B** and cost standards as set out in the City's Tariff policy.

8.3. Cleansing services

The City is responsible for ensuring general cleanliness in public spaces in its area of jurisdiction in terms of its Constitutional obligation to ensure an environment that is not harmful to health or well-being. A "boundary-to-boundary" principle is followed to ensure that public places the City is responsible for are maintained according to the policy.

The City provides services through both internal and externally-contracted mechanisms, which include community partnerships, to maintain cleanliness and hygiene standards.

Cleansing services consist of:

- a) The provision and servicing of street litter bins and street recycling bins where necessary;
- b) Ad hoc litter picking in residential roadways, commercial and industrial areas, highways, motorways and major arterial routes;
- c) Street sweeping;
- d) Street cleansing through the use of water tankers;
- e) Beach cleaning in accordance with the provisions of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 59 of 2008);
- f) The clearing of illegal dumping;
- g) Animal carcass removal from public space.

8.3.1. Provision and Servicing of Street Litter Bins

- a) Litter bins are provided for general use by the public in areas that are frequented by citizens and visitors to the City.
- b) Litter bins are positioned according to available infrastructure and the need that is generated by the presence of the public in business areas and transport interchanges, and by the use of public spaces, recreational areas and amenities.
- c) The standard for servicing litter bins is determined by the demand for services, size of litter bins, the type of area and its activities, and available resources.
- d) Generally, the City does not place or position litter bins in residential areas where there is no determined foot traffic volume.
- e) In certain areas, the City may place street litter bins and street recycling bins to facilitate the separation of litter and recyclables emanating from streets. The waste from these bins will be sorted for further processing of the recyclables in the industry.

8.3.2. Litter Picking

Litter picking is required due to littering, i.e. irresponsible behaviour by individuals, public, wind or private entities involving small quantities of waste that are generated (as opposed to the illegal dumping of larger quantities), but not placed in a container for collection, processing and disposal at a landfill site. The City is responsible for litter picking in all public areas, as per its constitutional obligation to maintain an environment that is not harmful to health and well-being. In addition to cleaning public places, it provides the service at/in:

- a) Verges alongside roads;
- b) Fenced-in public places;
- c) River banks and storm water canal edges;
- d) Traffic islands;
- e) Sports stadia, cemeteries, parks, amenities.

The City will ensure that litter picking occurs through internal or external services, including public partnerships, contracts and agreements that include communities, schools and

other non-governmental organisations. Due to the erratic occurrence of littering combined with local wind and weather effects, the litter picking service is provided on an "ad hoc" basis. The standards for general cleanliness are based on the Photographic Index set out in Annexure B.

Refuse bags for utilisation in clean-up campaigns may be provided at no cost subject to availability of funds and at the discretion of the Director: Solid Waste Management Services.

8.3.3. Street Sweeping

Street sweeping is an important cleaning service to ensure public road safety and to prevent the City's storm water reticulation systems from becoming clogged with sand, leaves and other waste, which may cause flooding during the rainy season.

Street sweeping is done using both mechanical equipment and manual labour. This could involve internal and external service mechanisms that include community contracts or EPWP projects. The street sweeping function is usually combined with litter picking in response to conditions that arise from a combination of environmental factors such as soil and other vegetation being blown into the streets, leaves dropping due to seasonal change, etc. The service is provided on a need basis for:

- a) Permanent surface roads in residential areas;
- b) Permanent surface roads in business districts;
- c) Permanent surface roads in industrial areas;
- d) Main arterial permanent surface roads and scenic drives;
- e) Courtyards of City-owned property (by SLA);
- f) Informal trading areas (sidewalks and designated areas);
- g) Bus termini, Bus lanes and transport interchanges;
- h) Taxi ranks (formal & informal).

The City will apply pro-active measures, which include the stabilisation of sandy areas and verges to prevent the effects of sand, to reduce costs, and to ensure the long-term sustainability of services.

8.3.4. Street cleansing and Disinfection

Street cleansing involves the use of water tankers and disinfectant where necessary for additional hygiene control to spray down permanent surfaced road surfaces in CBD's and other areas where human activity and natural process create a waste management or a hygiene problem.

8.3.5. Beach Cleaning

Beach cleaning is aimed at protecting the health and hygiene of people and the environment. This service is undertaken in accordance with the City's Coastal Management Programme and related City policies and plans, and involves the use of mechanical equipment and manual labour. Due to the specialised nature of some activities, it may involve external resources.

Beach cleaning involves litter bin servicing, litter picking, and kelp and shell removal on identified major beaches. It also includes the removal of carcasses of sea animals that wash ashore. Beach cleaning also encompasses the cleaning of incidental pollution resulting from emergencies due to oil spills at sea in collaboration with other responsible agencies. This service is provided as and when required and requires specialised equipment and services.

8.3.6. The cleaning of illegally disposed waste

The cleaning of illegally dumped material by or on behalf of the City is necessitated in reaction to the unlawful dumping of large quantities of waste on public or private property by generators of waste, or end-users of unusable goods. This may also include pollution. The prevention of illegal dumping is strongly dependent on available infrastructure, public reporting and law enforcement, which the City will respectively ensure through Solid Waste Management By-Law Enforcement, Metro Police and City Health Departments, or any other appointed law enforcement officer. This service involves large-scale cleaning with either mechanical equipment or manual labour either on City land or at cost of property owner on private land.

The City proactively endeavours to provide facilities located in strategic places around the city for the diversion of waste (specifically garden waste, recyclables, residential hazardous waste, and builder's rubble). It will also conduct awareness and education campaigns with the help of Council Committees as one of the methods of obtaining the assistance of members of the public and industry to avoid this practice. As a reactive step, the City will use its Integrated Waste Management By-law coupled with financial disincentives to discourage illegal dumping in the City.

8.3.7. Animal Carcass Collection

Animal carcass collection is a specialised service that is provided via internal and external mechanisms due to the specialised requirements to observe health and hygiene standards. It includes:

- a) The removal of large and small carcasses on public property and in public places;
- b) Carcass collection on beaches (dead seals, whales, and sea life that would constitute a public health threat).

8.4. Waste Treatment and Disposal

Services and Facilities provided by the City for Waste Transfer, Sorting, Processing, Treatment, Recycling and Disposal

The City must ensure the provision, safe operation and availability of a variety of licensed waste disposal services, transfer, processing and disposal facilities, equipment and related infrastructure. This includes the following, but does not exclude alternative disposal infrastructure and technologies that may have to be introduced or established in future:

- a) special facilities for dropping off small volumes of household hazardous waste by residents;
- b) special facilities for dropping off small volumes (thresholds determined by the City) of recyclable materials, garden waste, bulky waste and builder's rubble which will be prepared either for beneficiation (such as recycling, composting, crushing or reuse) or, as a last resort, disposal;
- c) special processing and treatment plants, such as composting plants, but may also include landfill gas plants, waste to energy or waste to fuel plants, in line with the City's objective to divert waste from landfill;
- d) special waste material recovery plants (e.g. MRF's);
- e) satellite drop-offs and waste transfer stations, primarily for transfer of waste, but which also may be used for sorting, crushing or chipping for onward beneficiation of the waste;
- f) landfill sites, which are licensed in accordance with legislative requirements.

8.4.1. Waste Treatment, Recycling, Transport and Disposal Services or Facilities not provided by the City

Various external service mechanisms are employed as part of the integrated waste management and minimisation processes that require specialized infrastructure, equipment and procedures. In keeping with its obligation to ensure that waste management services are provided, and are accessible to all in the City, the City has *de facto* elected to control and regulate, but not to provide certain services, infrastructure and facilities due to the specialised nature of some of these operations.

The City's own waste treatment, disposal and recycling services are thus augmented by;

- a) Infrastructure and equipment that are funded, provided, operated and maintained by external, predominantly privately owned entities.
- b) The specialised equipment, vehicles, equipment and infrastructure, and their operation and maintenance must comply with legal requirements defined by national and provincial legislation that incorporate SA National Standards (SANS) and international standards, as well as additional standards approved by the City from time-to-time.

8.4.2. Establishment of Infrastructure and provision of Equipment for Services not provided by the City (including Specialised Waste Management Services)

Any entity or person wishing to establish or operate specialized or other waste management infrastructure, equipment and vehicles, must follow the standard procedure as set out in the City's policies concerning development planning and business licensing.

8.4.3. Special Provisions: Scrap Metal/Materials and Recycling

- a) Scrap metal collection and the collection of recyclable materials such as glass, plastic, paper, rubber, electrical/electronic waste (or e-waste), etc. are essential components of recycling and waste minimisation that already contribute to achieving waste diversion targets in the City.
- b) The City also recognises the potential negative and disruptive environmental, economic, safety and aesthetic impacts of certain activities related to the collection of high-value scrap materials and recyclables, and the need to regulate such activities.
- c) It is the City's policy that all entities in the scrap metal/material business register with the City as per the standard procedure to ensure that the negative social environmental and economic impacts can be minimised, and to encourage further waste reduction practices through mechanisms that will remove recyclable materials from the waste stream.
- d) The City will endeavour to facilitate and fast-track the approval of initiatives for the establishment of markets, infrastructure and mechanisms that will operate in the City's boundaries as a means of enabling the recycling, recovery, repair, treatment and re-use of waste materials, goods and components.
- e) This will include, but will not be limited to plans approval, rezoning and land use, permit approvals, and the maintenance of data as required in terms of the National Waste Information Regulations.
- f) The City will encourage and control lawful recycling initiatives through various mechanisms, including appropriate financial instruments and incentives, as described in other policies, legislation and through appropriate City by-laws.

8.4.4. Special Provisions: Hazardous, Dangerous, Nuclear and Radioactive Materials

There are various environmental, health and safety issues attached to the handling and disposal of certain types of materials, machine components, plant and equipment containing metals that are being decommissioned and scrapped, which have been exposed to and have been contaminated by hazardous chemical substances (alternately classified as "dangerous goods") or radioactivity.

a) Regarding hazardous chemical substances and materials, specific mention is made of transformer insulation oils containing PCB's, insecticides and herbicides, lead-contaminated bulk fuel storage tanks and asbestos-containing

cladding, parts, insulation and roof sheeting.

- (i) Such contaminated materials may only be disposed of at a landfill site that has a licence for the purpose; and
- (ii) Once all other statutory requirements have been met that will prevent exposure of people and the environment to the associated hazards.
- b) It is the City's policy that no naturally radioactive materials, or materials that have been exposed to radioactive or nuclear processes, may be disposed of at a landfill or other site within the City's boundaries.
- c) Where waste will be transported via roads in the City, this may only be done in vehicles that are purpose-designed, constructed and fitted according to legal standards aimed at public, road and environmental safety. The operation and use is subject to the necessary construction, roadworthy and identification standards and requirements, especially where it involves "hazardous" or "dangerous goods" waste. There will be no exceptions to this policy.

8.5. Resource provision funding and performance management

To provide sustainable, equitable waste management service, the City will ensure that adequate funding and resources are available, and that these are managed efficiently in accordance with the City's obligations and other statutory provisions.

8.5.1. Resource Policy to sustain the Management and Provision of Waste Management Services

Human Resource Requirements:

Whilst the City employs a dedicated staff complement for the provision of various waste management services, the extent of population and City growth in geographic terms need to be offset against budgetary, infrastructure, equipment and staffing constraints and balanced by community needs. Service delivery may be ensured through a combination of mechanisms that include City staff, equipment and infrastructure, EPWP-type projects, SMME and community contracting initiatives related to community-based service programmes, and private sector services, which may also include partnerships.

The City's staffing requirements to sustain the implementation of the IWM Policy and the concurrent management of and/or provision of waste management services in the long term are mainly influenced and determined by, and must be balanced against:

- a) annual budget allowances and allocations made by National Treasury;
- b) Statutory requirements in respect of environmentally-sustainable waste management;
- c) Statutory requirements and provisions for financially sustainable and affordable municipal services;

- d) The availability and affordability of other funds for the procurement of assets and the development of infrastructure for the management of waste, or for the implementation of extraordinary or special programmes and projects;
- e) The densification policy adopted by the City in anticipation of the city's net population and economic growth, balanced against the needs of its citizens;
- f) The City's policies linked to the National Government's Poverty Relief Strategy, Expanded Public Works Programme and SMME development;
- g) Extraordinary programmes, such as Urban Renewal;
- h) Non-routine major and international events hosted in the City of Cape Town;
- i) Specialist waste management services requiring special equipment or skills (involving industrial, hazardous, health care and nuclear waste in particular); and
- j) Specialised needs, such as those of City Improvement Districts, which may off-set staffing needs by employing alternate service provision mechanisms.

8.5.2. Funding Policy to sustain Integrated Waste Management

The City is required to standardise the different service delivery mechanisms in a balanced way appropriate to managing various classes and types of waste, according to different end-user needs and benefits, and environmental concerns in terms of:

- a) Equitability and cost norms (framed by the availability of funds, and as per the City's Tariff Policy); and
- b) The mechanism of service needed by different communities, industries, business and/or visitors' needs in support of the City's objectives of enhancing local economic development and sustainable job creation where possible.

8.5.2.1. Financial Policy Framework for Integrated Waste Management

The waste management services that are either regulated or provided by the City are neither purely rates nor purely tariff funded. The basis of funding is therefore determined by the nature and the type of service and related resources, equipment or infrastructure, and whether a fee can be used to recover the cost of the service (as determined by the City's Tariff Schedule).

- a) In general, the funding should be provided for specific integrated waste management aspects i.e.
 - (i) Capital funds that may include, but not be limited to technical and feasibility investigations/studies/consultation fees, land acquisition, infrastructure development, equipment acquisition, new buildings and facilities (i.e. liners for landfills, transfer stations, drop-off or recycling centres, composting plants, etc.), remediation and closure (capping of landfills, landfill gas management and rehabilitation),

(ii) Operational funds to cover the costs associated with the maintenance, repairs,

management, staffing and administration of waste collection, diversion/minimisation, treatment, cleansing and disposal.

- b) For the purposes of defining the funding principles for the City's waste management, functions and activities are grouped as follows:
 - (i) collection of refuse and waste, including the provision of drop-off sites for use in residential areas, as well as various separation at source initiates;
 - (ii) Cleansing;
 - (iii) Waste disposal and treatment, including landfill sites, transfer stations and related waste handling and waste diversion infrastructure; and
 - (iv) Waste planning, including waste minimisation, administration and management overheads.
- c) The City's ability to obtain and provide funding, and to generate income and recover costs are directly influenced by:
 - (i) the City's final decision on the quantum and level of rates and tariffs;
 - (ii) the City's stakeholders' ability and willingness to pay the rates and tariffs;
 - (iii) the level of indigence and the ration in proportion to the total population, as determined by the City's Indigent Policy;
 - (iv) the City's Credit Control and Debt Collection Policy and Credit Control and Debt Collection By-law, 2006.
 - (v) a combination of all factors that influence the level of internal as well as external cross-subsidisation that will be used to make up any short-falls in the recovery of costs;
 - (vi) the City's ability to enforce its by-laws that contain punitive financial measures;
 - (vii) the City's ability to raise funds for capital projects from sources other than the annual budget allocation by the National Treasury;
 - (viii) the City's decisions regarding the MSP's to operate related waste management infrastructure on a "Build-operate-and-transfer" (BOT) or another basis determined by national policies;
 - (ix) the City's decision related to improving cost-effectiveness and efficiencies, balanced against community needs and the City's growth, which may lead to EPWP projects and community-based contracts, SMME involvement, as well private sector contracts for the provision of services;
 - (x) levels of staffing; and
 - (xi) the City's decision to own or lease high-value assets (land, infrastructure or equipment).

8.5.2.2. Funding of Capital Expenditure Sources and Funding Options

The capital budget will be made available for the provision of infrastructure for the integrated and effective management of waste in a manner that is consistent with the City's financial policies.

8.5.2.3. Funding of Operating Expenditure

1) Direct Cost Recovery through billable Tariffs

Direct cost recovery is possible where a fee can be charged as per the City's Tariff Schedule. In relation to the City's tariffs, the SWM functions will be funded as follows:

- a) Collection of waste (100% of its budget requirement).
- b) Disposal of waste per mass determined by weighbridge measurement or by allowed volume per the tariff schedule, or where the cost of a cleaning and rehabilitating the pollution effects from a marine/coastal or land/road spill, or the clean-up cost and effort associated from other man-made or natural disasters is determined *post factum* in relation to the provision of staff, equipment, materials and administration services (100% of its budget requirement).
- c) Disasters: recovery of costs from National or Provincial government funds made available for the purpose, or cost recovery from companies responsible for manmade disasters or from their insurance companies (100% of cost incurred).
- d) Direct cost recovery, however, takes into account shortfalls arising from Council decisions to write off bad debt, which must be funded through other means.

2) Indirect Cost Recovery through a Rates Apportionment and other Mechanisms

a) Rates for Waste Management Services

When waste is illegally dumped and littering takes place, it impacts on the natural environment (soil, surface and ground water, fauna and flora, etc.) as well as human health. These acts are indiscriminate, random and unlawful acts, perpetrated undetected by citizens, visitors, informal and formal business concerns alike. Natural waste processes also contribute to the waste.

The City acknowledges that it is in the interest of its citizens and the environment to keep areas under its jurisdiction clean, and subscribes to the principle that this service is provided for public good. The City collects rates from business entities to fund indirect costs pertaining to services such as cleansing. It forms part of the Solid Waste Management Department's budgetary requirements, which may be varied from time-to-time according to functional need. The apportionment from this income is to be sub-divided as set out below.

- (i) Collection of wastes (nil);
- (ii) Cleansing (100% of its budget requirement);
- (iii) Disposal (nil);
- (iv) Drop-offs (100%)
- (v) Service Authority/Regulatory Head Office function, Waste Planning, Administration and Waste Management Support function overheads
 City of Cape Town: Integrated Waste Management Policy 53

(approximately 40% of budget requirement while the difference (60%) is recharged to the foregoing core service Branches).

The above also relates to interdepartmental SLA's that specify the cost of services to be recovered directly from the budget of the Department receiving or requiring such services, as provided by or on behalf of the Solid Waste Management Department.

b) Cross-subsidisation from Tariff-funded Revenue to account for budget shortfalls

Internal Departmental cross-subsidisation from tariff-funded (or direct funded) waste management services to indirect funded services will be limited to a maximum of 5% of net income generated by all sources of revenue.

c) The Funding of Services for the Indigent

Waste management services for the indigent will still be supported through the City's Indigent Fund, from which an equitable portion will be transferred to the Solid Waste Management Department's annual budget.

d) Cost Recovery for Emergency or Disaster-related Waste Management Work

- (i) The Director: Solid Waste Management will ensure that an account is raised through internal billing, charging the Disaster Management Department for all reasonable costs in accordance with cleansing tariffs, to include all costs incurred for the utilisation of City resources, equipment and materials, and/or for those contracted and procured in respect of waste management activities to deal with the effects of an emergency or a disaster.
- (ii) Where possible, the Disaster Management Department of the City will through the Sundry Debtors procedures in the Revenue Department recover any costs incurred from parties responsible for an emergency or man-made disaster requiring waste management services.
- (iii) In the event of natural disasters or emergencies, the Disaster Management Department of City will apply for emergency relief and funds either from National or Provincial Government as appropriate, and apportion monies to cover the unplanned and unbudgeted costs incurred for waste management activities.

8.6. Management and provision of assets

8.6.1. General Provisions

Solid waste management assets will be managed in accordance with the City's Corporate Asset Management Policy.

8.6.2. Asset Provision and Management Principles: Waste Management

- a) The City subscribes to the principle that if it is to provide a service, it will provide the assets (resources) that will ensure service delivery.
- b) This may be via direct ownership that will require obtaining and providing capital for the purchase of assets, or on the basis of leasing capital assets via a contractual arrangement.
- c) For City-owned assets, the City will provide the facilities and resources to maintain assets to an optimal standard according to its financial means.
- d) For leased assets, the City will manage contracts to ensure that the assets are available for maximum utilisations, at the minimum of costs.
- e) The City will ensure that the necessary systems and resources are provided for the maintenance and management of assets that are deployed for the provision or in support of service delivery.
- f) The City will ensure that the assets are replaced, or that contracts are renewed in time to ensure their availability for service delivery.

8.6.3. Asset Management Standards: Waste Management

The capital assets required for the provision of an integrated waste management service range from fixed to moveable assets that have to be maintained, repaired and in some instances, replaced at routine intervals that will require capital expenditure in accordance with other City's policies.

8.7. Responsibilities in preparing and responding to Emergencies and disasters

In terms of functional responsibilities and the availability of resources employed and deployed to manage waste in the City, the City's Solid Waste Management Department will be responsible for the waste management role as part of the City's Disaster Management Plan.

The following principles apply to the Solid Waste Management Department's roles and responsibilities in terms of the Disaster Management Plan:

- (i) The Director: Solid Waste Management will ensure that a waste management plan is drawn up as part of the preparatory work necessary to enable the Department to respond appropriately to both man-made and natural disasters;
- (ii) The Director will inform and appoint officials from the Department in accordance with the roles envisaged by the City's Disaster Management Plan and the Department's specific plan for managing waste during emergencies and disasters;
- (iii) The Director will ensure that staff receive appropriate emergency response

training to safeguard them while taking part in disaster or emergency response activities;

- (iv) The Department will coordinate efforts and activities required for clearing and cleaning debris and pollution effects on land, transporting; and disposing the waste at a landfill site licensed for a specific type of waste;
- (v) The responsible department for aquatic areas and infrastructure will be responsible for the clean-up of debris and pollution on water bodies, whilst the Department of Solid Waste Management will be responsible for coordinating the transport and disposal of this waste to appropriate landfill sites or alternative waste management facilities, as appropriate;
- (vi) Functional departments will be responsible for the rehabilitation and repair of City infrastructure, buildings, equipment or public places. The costs for such repairs will be allocated to the respective departments.
- (vii) The management of hazardous or dangerous waste during a disaster will be done in consultation with, the designated official of the City's Disaster Risk Management Centre.
- (viii) The Department will make resources available in accordance with the scale and type of disaster.

8.8. Waste Information System

The NWMS requires that a national database and system be set up to track waste as part of the waste minimisation strategy. The City subscribes to the requirement of the NWMS to provide data from the local level to other levels of government via a Waste Information System (WIS) in accordance with the Waste Information Regulations. To this end, different roles and responsibilities are necessary to ensure that all parties involved in the management of waste will play a contributory role.

The City will accumulate and coordinate data, and process the information that should be provided as per the NWMS requirements by means of a WIS, to comply with the minimum requirements and reporting standards. To accomplish this, the City must establish and support a WIS that meets the minimum requirements. It should have the following functions:

- a) To register and record data in a format required by the WIR;
- b) To analyse and process data to produce information;
- c) To report waste information to Provincial or National Departments as required.

8.9. Compliance and accreditation

By-law enforcement pertains to the application of various City by-laws related to the regulation of waste management, particular to non-adherence to the City's standards as set by this and related City policies, and the general protection of public and environmental health. All transgressions will be dealt with by the City in terms of the provisions of City by-laws and other applicable legislation.

The City's Integrated Waste Management By-law, 2009 requires all waste service providers to be accredited by the City. Accreditation of waste service providers is intended to regulate waste generation and service providers conducting business within the jurisdiction of the City, thus ensuring that all waste generated is managed in a lawful manner.

For transporters of waste, accreditation also confirms compliance with Section 25 (b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), and thus they are also required to become accredited and provide information as required by the City.

The Waste Management Officer may direct certain groups of waste generators to submit waste management plans and waste service providers to apply for accreditation or introduce thresholds as a requirement for accreditation.

- a) It is the City's policy that all waste service providers must comply with the requirements for accreditation as determined by the City's Integrated Waste Management Bylaw,2009. Any accredited party who has been found to transgress the City's Integrated Waste Management By-law, 2009 or any related environmental legislation may be prosecuted criminally. If the party is found to be guilty in a court of law the City may withdraw its accreditation upon notice of intent to do so, and provision of an opportunity to the guilty party to make representations.
- b) All applications for demolition of buildings as well as applications for approval of building plans (City directed thresholds), must provide an integrated waste management plan for approval by the City as part of their building/demolition plan applications. This plan must include waste streaming and diversion mechanisms and targets, as well as waste disposal options.
- c) Accreditation is valid for twenty-four (24) months calculated from the date of signature of the accreditation. The onus lies on the applicant to apply for renewal within the accreditation validity period or to seek accreditation should activities, be expanded or amended, whichever is soonest. To allow for official processes, renewal applications must be submitted at least 60 calendar days prior to the expiry date or prior to the date upon which the expanded or amended accreditation is required.

8.9.1. Reporting Requirements and Responsibilities for Accredited Parties

The City requires regular reporting by individuals and entities that generate handle and transport specific types and classes of waste for disposal at a landfill site or for recycling purposes. This applies to all waste generators and accredited service providers in terms of the City's Integrated Waste Management By-law, 2009. See Annexure E for generic requirements for waste information system and reporting.

The City will report to the provincial authority in terms of WIR on all waste statistics related to disposal and diversion from landfill.

8.9.2. Suspension and revocation of accreditation

- a) Accreditation granted by the City may be suspended or revoked by the waste management officer on the following grounds:
 - (i) The service provider has breached the conditions of its waste management licence and the national or provincial authorities have suspended or revoked the licence.
 - (ii) The service provider has breached the City's Integrated Waste Management By-law, 2009 and has been convicted in respect of such transgression or paid an admission of guilt fine.
 - (iii) The service provider has breached the requirements of any national or provincial legislation relevant to waste management activities, and has been convicted accordingly or paid an admission of guilt fine.
 - (iv) The service provider has breached any conditions attached to the accreditation.
- b) Accreditation of the waste service provider may only be suspended or revoked after the service provider has been given notice in writing of the intent of the City to suspend or revoke its accreditation and has been afforded an opportunity to make representations to the City in this regard within a period of 30 days after the date of service of such notice.
- c) The City must make a decision within 14 days of receipt of representations by the service provider regarding the intended suspension or revocation, or within 14 days of notification by the service provider that it does not wish to make representations, or, in the event of no response being received from the service provider, within 14 days of expiry of the thirty-day period referred to in the notice.
- d) The City may take into account the severity and impact of the relevant breach prior to determining the duration of a suspension to be imposed.
- e) Any person may appeal against a decision taken by an authorised official under this policy by giving written notice of the appeal in accordance with the provisions of section 62 of the MSA.

8.10. Communication, Education and Awareness

The City accepts the responsibility to communicate with all individuals and entities in the municipal area regarding issues that will encourage integrated waste management that focuses on waste minimisation. A range of mechanisms and media will be used to achieve heightened education and awareness levels to ensure that all private and corporate citizens and visitors to the City take ownership of and manage their waste responsibly, including participation in waste minimisation initiatives.

The aim is to encourage communities to take ownership, practice responsible waste management and take care of their environment. Therefore, programmes have been strategically designed and projects conceptualized and developed to be implemented for

various target groups, internal to the City of Cape Town as well as various external groups such as schools, communities, organisations, institutions and business markets.

Key Strategic Programmes

- Broader Public awareness programme
- Education and schools recycling Programme
- Communications (incl. marketing) Programme
- Partnerships and networking

a) Broader Public Awareness Programme

The City will embark on public awareness and education programmes designed to integrate and supplement all efforts to minimise waste, combat illegal dumping and littering within the City. The fundamental principle of the programmes is to support waste minimisation and to encourage a no litter and dumping behaviour by employing numerous waste awareness and waste educational programmes.

An important aim of education and awareness is to foster co-operation with the Solid Waste Management Department and other departments involved in the cleaning, clearing and management of waste, the private sector and the community.

The City will also drive education and awareness in the waste management sector to ensure that business and industry that generate waste comply with the City by- laws, national and provincial legislation and encourage waste minimisation and diversion practices when conducting their businesses.

b) Education and schools recycling Programme

The City will actively partner with the Western Cape Education Department to ensure that local schools and educators become involved in waste management and recycling initiatives as well as in educating the learners.

c) Communications Programme

The City will provide and maintain a website to communicate about integrated waste management, minimisation and recycling issues to all stakeholders. The Solid Waste Management Department will be responsible for the content, supported by the IT and Communications Departments.

(i) Routine Communication by the City

The City will provide printed information via various mediums including the use of direct mailers or newsletters, inserted notifications distributed in the monthly accounts to

communicate about changes in the waste management services provided by or on behalf of the City and to provide guidelines and information about waste management responsibilities by all stakeholders.

(ii) Establishment of Call Centre

The City will maintain a call centre that can be used by anyone for purposes of logging service complaints, requesting information or reporting unusual activities.

(iii) Signage

The City will erect approved signage to regulate waste management practices including illegal dumping.

d) Partnerships and networking

The Solid Waste Management department will engage with business and industry, either through representative bodies, or with individual organisations to facilitate the provision of infrastructure and services, through private, industry-specific and public-private initiatives that will enable and ensure waste minimisation subject to all applicable policies e.g. the City's Supply Chain Management Policy and applicable legislation.

9. IMPLEMENTATION PLAN

All the policy directives are implemented through the City's IWMP which is developed in line with the IDP every 5 years and reviewed annually. In addition, business plans and SDBIP's are developed annually to give effect to the objectives of the IWMP.

10. MONITORING, EVALUATION AND REVIEW

Monitoring and Management of Performance a) General Provisions

The City subscribes to a generally-accepted performance management system for its waste management services that are aimed at:

- (i) setting benchmarks and targets, and defining performance standards either through the policy, or a performance contract;
- (ii) designing methods that will enable performance management;
- (iii) measuring, monitoring, managing and correcting;
- (iv) continuously improving processes, methods and service mechanisms to the benefit of all stakeholders; and
- (v) reporting to key stakeholders about the performance of waste management services.

All entities, as well as the City's departments involved in waste management activities, are subject to the City's oversight, audit and regulation in terms of the NWMS, the City's IWM Policy and the City's by-laws and other applicable legislation that frame and define standards and the key performance indicators for waste management services. These standards are revised from time-to-time, and are measured for corrective and reporting purposes in terms of generally-accepted performance management criteria and practice.

The performance management system's main aim is to continuously improve sub-standard service outcomes by applying generally accepted management principles.

The following policy aspects will be reported on bi-annually to the relevant \$79 committee

b) Service Standards and Performance Measures

The service standards and performance measures are set out in **Annexure A** and **Annexure B**. Details may change from time-to-time, and are subject to strategy, available infrastructure, resources, and funding that may force the City to consider a change in level, frequency, mechanism of provision, service provider, etc. The standards are based on process management logic that assesses input activities, as well as outputs and outcomes for integrated waste management to ensure the process can be managed holistically to adjust input activities when desired outcomes are not reached. The performance measures are also related to the business plan for the SWM Department, which has been derived through the Balanced Score Card that has been adapted for the Department.

(i) Collection Standards

The minimum service standards and outcome for the collection of waste is the collection of the contents of one bin (or equivalent), once a week, outside the dwelling.

(ii) Cleanliness Standards

The general approach that is used to monitor and measure cleanliness outcomes in the City, is based on the outcome of cleansing effort as determined from time to time.

(iii) Waste Treatment and Disposal Facilities Standards

The service standards and outcomes for sorting and recycling, landfill gas management, waste processing, treatment, transfer and disposal facilities are primarily framed by legislative and permit requirements which relate to pollution levels of various kinds. The key service levels for these facilities are the hours of access and operational availability of infrastructure and facilities, so as to prevent unnecessary delays, or that may lead to unlawful practices (illegal dumping, etc that will have environmental and health impacts).

The City's waste disposal and handling facilities will be subject to at least one audit per year that will be conducted by an external entity that is deemed legally competent to provide a report on the environmental conditions and operating practices at these waste management facilities.

c) Waste Minimisation Targets

In terms of the National Waste Management Strategy, the National Development Plan (Outcome 10) and other policy directives, the City will set targets for waste minimisation to be met over a specified period. These figures will also be subjected to reporting in terms of the Performance Management procedures of the City and the WIR.

d) Tariff / Economic Viability and Sustainability Standards

The City will ensure that the ratio of payment-to-the-total-amount-of-fees-and-rates- billed (level of payment), and the recovery of debt is maintained so that debt payment levels and debt recovery is maximized.

e) Indigent Targets

The City's Credit Control and Debt Collection Policy and the Indigent Policy determine the level of indigence in terms of income and results in the provision of "free basic services" that include the provision of fully rebated collection and cleaning services. In principle, the costs of these free basic services are subsidised through other sources of income and must be fully accounted for in terms of the provisions of the MFMA. The City will implement a system that monitors the gross amount subsidised, as well as the level of income of a household to ensure that households that no longer qualify for such subsidies are billed accordingly, in order to maintain the financial sustainability of the service.

11. POLICY REVIEW

The City's IWM Policy will be reviewed every two year or as the need arises in accordance with timeframes linked to the NWMS, NDP and any other legislative guideline. It is intended to be flexible, yet robust. However, if National policy or legislation or if concurrent City policies that influence and guide this policy are amended, the City's IWM Policy should be reviewed through the City's approved processes and structures, as is required.

ANNEXURES

Annexure A: Waste Management Service Categories and Service Levels.

<u>Annexure B</u>: Cleaning Categories and Service Standards.

<u>Annexure C</u>: Waste Management Requirements for Service Planning Purposes.

Annexure D: Recyclable Materials accepted at City-provided Infrastructure.

Annexure E: Requirements for Waste Information System and Reporting.

Annexure F: Policy amendment Schedule.

	Table A.1: Different Classes and Categories of Waste, including Service Provision Information Important note: Residential Waste has a number of service levels – Refer to Table A.2, as well as the Tariff Policy for tariff details					
Category	Class	Туре	Waste Minimisation Mechanism Guidelines	Service Provider	Special Provisions or Comments	
ential	Residential Waste	General, non- hazardous	Waste separation by resident of recyclable material.	The City, or an approved community partnership, or an approved accredited waste contractor to collect waste for	Includes recyclable and non-recyclable wastes.	
Residential	Residential Waste (special, bulky)	General, non- hazardous	Waste separation by resident of recyclable material.	The City, or an approved community partnership or an approved accredited waste contractor to collect waste for	Includes recyclable and non-recyclable wastes too large for normal collection.	

ANNEXURE A: WASTE MANAGEMENT SERVICE CATEGORIES AND SERVICE LEVELS

Garden Waste	General, non- hazardous	Resident may compost on own property under conditions and guidelines determined by the City to protect environmental and human health. The City will compost organic waste and biodegradable wastes as far as possible.	Parks dept, resident or small contractor (e.g. garden service companies, etc.) collects and transports this type of waste to specially-provided drop-offs sites. The City processes organic waste at special composting sites, or disposes waste at a landfill site.	Includes vegetation or vegetable matter that is biodegradable. Special facilities are provided by the City at pre-selected sites.
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Category	Class	Туре	Waste Minimisation Mechanism Guidelines	Service Provider	Special Provisions or Comments
	Builder's Waste	General, non- hazardous	Builder or contractor collects and transports builder's rubble for further processing at a facility such as a crushing plant or to a landfill site.	Private contractor (e.g. builder or waste removal contractor) collects for disposal. The City or contractor operates and maintains these facilities.	Not for general landfill disposal. Special facilities are provided by the City at pre- selected sites. The City does not provide this service.

	Builder's Waste	General, contaminated	Builder or contractor collects and transports contaminated builder's waste to a hazardous landfill site.	Private contractor (e.g. builder or waste removal contractor) collects for disposal. The City or contractor operates and maintains these facilities.	Not for general landfill disposal. The City does not provide this service.
Business	Business Waste	General, non- hazardous	Waste separation at source to divert recyclable materials prior to collection (On-site waste management)	The City or a contracted private sector service provider.	Applicable to properties zoned for "business" use in a business district (non- industrial). Will apply to informal traders Includes recyclable and non- recyclable wastes for normal collection and/or too large for normal collection.
	Industrial Waste	General, non- hazardous	Waste Exchange and/or Waste separation at source to divert recyclable materials prior to collection (On-site waste management).	Accredited private sector service provider	Includes recyclable and non-recyclable wastes for normal collection and/or too large for normal collection.

Importa	Table A.1: Different Classes and Categories of Waste, including Service Provision Information Important note: Business Waste has a number of service levels – Refer to Table A.2, as well as the Tariff Policy for tariff details Category Class Type Waste Minimisation Service Provider Special Provisions or					
Category		Туре	Mechanism Guidelines	Service Provider	Special Provisions or Comments	
	Special Industrial Waste (Hazardous)	Hazardous substances and materials (as defined by codes of practice and statutes describing "Hazardous Chemical Substances"	Waste streaming and/or separation of liquids, components and materials that can be reprocessed for recycling or reuse	Accredited private sector service provider able to prove statutory compliance related to the handling, transfer, storage, use, processing and transportation of hazardous chemical substances	Solid and liquid wastes that are hazardous to human health and the environment, which require special arrangements in terms of applicable legislation governing hazardous chemical substances. Also includes components containing hazardous elements if not disposed properly (e.g. electronic circuitry and components, fluorescent tubes, etc).	

Business	Special Industrial Waste (Dangerous)	Dangerous Goods (as defined by SANS 10228 and 10229)	Waste streaming and/or separation of liquids, used components and materials that can be reused, or reprocessed for recycling or reuse as applicable	Accredited private contractor able to prove statutory compliance related to the handling, transfer, storage, use, processing and transportation of "Dangerous goods".	All other gasses, solids and substances not covered in the previous category, including the residue, by- products or waste relating to the Explosives or Armaments Industries.
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Category	Class	Туре	Waste Minimisation Mechanism Guidelines	Service Provider	Special Provisions or Comments
	Health Care Risk Waste	Hazardous	Refer to Provincial Hazardous Waste Management Plan	Accredited private contractor	Includes "sharps", pharmaceutical, laboratory and human wastes, etc. including fluids. Also includes veterinary wastes. Usually requires special processing and/or
					destruction through incineration to prevent human health effects and environmental contamination.

Nuclear or Radio- active Waste	Extremely hazardous	None available yet	Government agency (through accredited private contractor)	Includes wastes or scrap that have been contaminated by nuclear energy sources used in a variety of industries that require special handling and disposal permits and arrangements, and nuclear power generation.
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	Household Waste collection Service		Non- Waste Management Service	
Service Level	Informal	Formal	Commerce	Industrial (non- City service)
Emergency (sub- standard)	Skips out-sourced, collected at least once per week until Standard level is offered.	n/a	n/a	n/a
Standard	Door-to-door collection of bagged refuse (85- litre refuse plastic bags), at least once per week.	Kerbside collection of binned waste (240-litre plastic wheeled bin), minimum one bin per erf at least once per week.	Minimum once a week contained in a minimum of 1 approved bin, as per a Waste Management Plan submitted to the City.	Waste Managemer Plan submitted to City determines need. Private contractor provides as per need.

Standard (operationally constrained)	n/a	Kerbside collection: refuse in bags (85-litre bags), at least once per week, allowing for more bags than the minimum. Geographic constraints and/or service road access prevents a wheeled bin service.	Waste Management Plan submitted to the City determines need, Private contractor provides as per need and constraints.	Waste Management Plan submitted to City determines need, Private contractor provides as per need and constraints.
Enhanced	As determined by the director SWM.	Kerbside waste collection in more than 1approved container, at least once per week (also applicable to Backyarders).	More than one approved container, and/or more than once per week, as per a Waste Management Plan submitted to the City.	Waste Management Plan submitted to City determines need, Private contractor provides as per need.
Special (ad hoc)	Events, pre-arranged.	Garden waste, or special volume collection.	Special volume collection.	Special volume collection.
Recyclables	Separated recyclable material in bin or bag, Removal may be organised on a contractual basis in selected areas (City prerogative).	Separated recyclable material in bin or bag, Self-organised transport to Drop-off site, Removal may be organised on a contractual basis in selected areas (City prerogative).	Kerbside collection of waste in 1 approved container, mainly through in-house waste management services, at least once per week.	Private contractor provides as per need.

Service Request	Description	Minimum Expected Service Level
Residential Refuse Collection	Kerb-side or door-to-door collection of waste contained in 240 litre wheelie bins (minimum one/household) or 85 litre black plastic bags.	Once-a-week collection, including Public Holidays, excluding week-ends.
Waste Minimisation Clubs	Kerb-side collection of waste contained in 240 litre wheelie bins or 85 litre black plastic bags from cluster or high density developments that are committed to active waste reduction, and who have written permission from the Director Solid Waste Management.	Once-a-week collection, including Public Holidays, excluding week-ends.
Business (Formal Business) Refuse collection	Kerb-side collection of waste contained in 240 litre wheelie bins or 85 litre black plastic bags if service is constrained.	100% compliance at a frequency as per contractual arrangement, seven days a week in CBD area.
Informal Business Refuse collection (includes traders in large leased areas, dedicated bays)	Kerb-side collection of waste contained in approved containers.	As determined by the Director SWM.
Special Events Waste Management	Comprehensive waste management and/or cleansing service requested by event organiser(s).	Ad hoc with every event, based on pre- event needs determination (either City or private contractor).

Supply of 240 litre wheelie bins	240 litre wheelie bins (replacement or additional) requested by customer or for new tenant.	Delivery of bin at least within 1 week of request.
Supply of refuse plastic bags	Black plastic bags requested for organised (community) clean-up.	Free, if departmental budget allows.
Bulk/ Special Container Service	Special container requested by customer for large volumes of waste.	Ad hoc on a case-by-case, needs basis either by the City or a private waste management contractor.
Special Waste Management	<i>Ad hoc</i> collection/ removal of bulky waste requested by customer.	Ad hoc on a case-by-case, needs basis, needs basis either by the City or a private waste management contractor.
Industrial Waste Management	Collection, treatment and/or disposal of waste from customers in industrial areas (non-City service).	Service Provision by private waste management contractors with specialised equipment and infrastructure, per contractual arrangement.

TABLE A.3 Explanation of Minimum Expected Service Levels			
Service Request	Description	Minimum Expected Service Level	
Hazardous Waste Management, including Health Care Waste	Collection, treatment and/or disposal of contaminated or hazardous waste (non-City service).	Service Provision by private waste management contractors with specialised equipment and infrastructure, per contractual arrangement or on an ad hoc basis.	

Drop-off sites	Conveniently located sites for use by residents, City departments and small garden service contractors. Free loads of non-household waste clean garden waste, clean builder's rubble and recyclables are accepted, but limited to vehicles with a combined carrying capacity of 1.5 tonnes and frequency as determined from time to time.	Seven days a week, hours to be determined from time to time as per operational requirements.
Transfer Stations	Facilities for transferring waste to optimise service logistics (reduce travel times and costs) due to travelling distances to landfill sites.	Hours of availability to accommodate service need (internal and external service providers).
Waste Processing sites	Special separation facilities where recyclable materials are sorted for diversion away from landfill sites.	Hours of availability to be determines as per operational requirements (internal and external service providers).
Landfill sites	Sites specially designed, prepared and constructed to minimise environmental and health impacts that are licensed and operated under a permit issued by DEAT, either by the City, or by private waste management companies.	

Class of Waste	Туре	Service Provider	Comments
Builder's Rubble (non- residential)	Non-hazardous	Mainly private contractors, or by contractual arrangement by the City	Recycling via special plants, or disposal at City-operated landfill sites
Business waste	Non-hazardous or hazardous	Private contractor, or by the City	Businesses and informal traders in a business district that could also be in a CID
Industrial waste	Non-hazardous	Mainly private contractors, or by contractual arrangement by the City	Disposal at permitted landfill sites
Waste collection from privately- owned land (non-residential residential)	Non-hazardous or hazardous	Private contractor, or by contractual arrangement by the City	Informal settlements on privately-owned land (e.g. farms)
Dried Sewage sludge	Hazardous	Currently private waste management company	Disposal at hazardous landfill site
Waste from hazardous chemical substances and materials (per definition: "Hazardous")	Hazardous - environmental and human health hazard	Currently private waste management company	Special category of Industrial Waste, much of which is recoverable for re-use, with disposal at privately-operated landfill sites

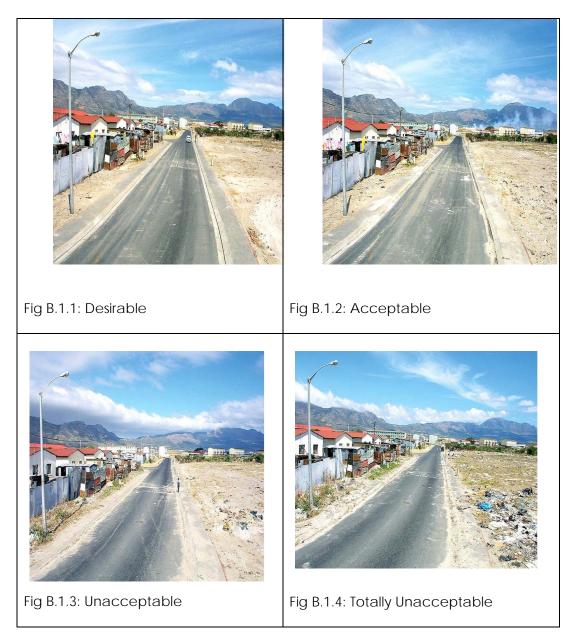
Waste from dangerous goods and materials (per definition: "Dangerous Goods")	Hazardous - environmental and human health hazard	Currently private waste management company	Special category of hazardous waste with disposal at privately- operated landfill sites
Nuclear or radioactive wastes, or nuclear contaminated wastes	Extremely hazardous- environmental and human health hazard.	Government-appointed contractor.	Use and disposal controlled by specific statutes. Disposal may only occur at a permitted landfill site.
Health care waste (including veterinary Waste and animal carcasses)	Hazardous - environmental and human health hazard.	Currently private waste management company,or by contractual arrangement by the City (carcasses).	Special category of Industrial Waste with treatment anddisposal at privately- operated landfill sites.



ANNEXURE B: CLEANING CATEGORIES AND SERVICE STANDARDS

The following Photographic Index determines levels of cleanliness for formal and informal areas that relate to cleaning and litter picking. The minimum standard for formal residential areas is "Acceptable".

TABLE B.1: STANDARDS OF CLEANLINESS – FORMAL AREAS



The following Photographic Index determines levels of cleanliness for formal and informal areas that relate to cleaning and litter picking. The minimum standard for informal residential areas is "Acceptable".

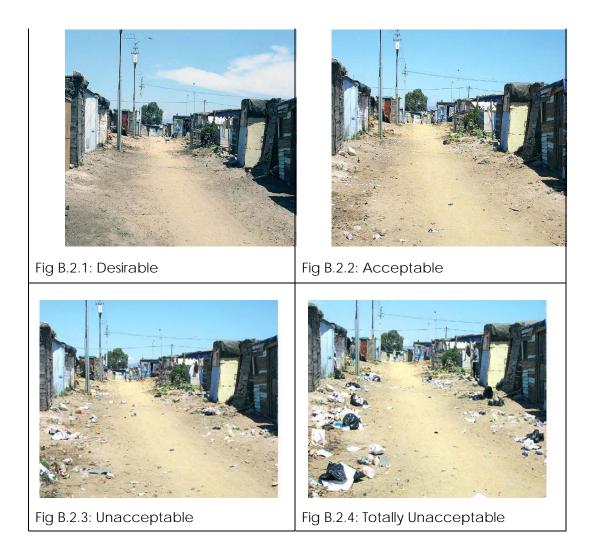


TABLE B.2: STANDARDS OF CLEANLINESS – INFORMAL AREAS



ANNEXURE C: WASTE MANAGEMENT REQUIREMENTS FOR SERVICE PLANNING AND BUSINESS LICENSING PURPOSES

The City must ensure the provision of services through proper planning and administration. The following document relates to either ensuring the provision of waste management services for bulk waste generators, or whenever there is a change required in waste management services due to expected changes in the volume or type of waste that will be generated. It is also required for special service requirements.

All business customers must provide the City's Solid Waste Management Department with information as per the "Waste Assessment" form. Documents must be completed for waste disposal and minimisation planning purposes irrespective of whether the City's Department will be providing a waste collection service. The following forms must be completed by an authorised official of the applicant at one of the City's contact centres when a business registers as a business partner:

- 1. The City's standard "Service Application" form, indicating the service type and service level requirement for waste management services if this applies;
- 2. The "Waste Assessment" forms, indicating the nature/type and extent of waste that the business will generate (see sample form on next page).

This is applicable for building, construction and development projects as well. Where applicable, waste management service provision will start once a contract for services has been signed by the Solid Waste Management Department in accordance with the needs as specified by the applicant on the form.

Normally, private residents do not have to fill in the "Waste Assessment" form. However, all residents who do have special needs or that require a change to the standard service level must also complete the "Waste Assessment" form in addition to other forms that may be required. All special residential needs are deemed "enhanced services" and must be approved by the Director Solid Waste Management before a change in service or tariffs may occur. All Waste Assessment forms must be returned to the Solid Waste Management Department as per the routing details on the form.

ANNEXURE D: RECYCLABLE MATERIALS ACCEPTED AT CITY-PROVIDED INFRASTRUCTURE

The City will support the diversion of recyclable waste through the use of its infrastructure by residents (non-business or industrial entities) in terms of sustainability and affordability criteria. The following materials are currently accepted at City- provided drop-off or diversion sites:

- i. Organic material (garden waste);
- ii. Wood;
- iii. Clean builder's rubble (uncontaminated by hazardous substances);
- iv. Paper and cardboard;
- v. Glass;
- vi. Plastic (accepted types will be published in a public guideline in association with the Plastics industry);
- vii. Aluminium and steel cans;
- viii. Scrap metal;
- ix. E-waste (electrical and electronic waste containing reusable components and/or hazardous materials that are recyclable and/or hazardous that should not be landfilled with general waste);
- x. Residential or household hazardous substances and waste items (small quantities);
- xi. Used lubricants and oil from residents (so-called "garage waste").

Clean Garden Waste must either be bagged in 85-litre bags or tied in bundles not longer than 1.2 m. Garden waste material (branches, etc.) may not exceed 60 mm in cross section – larger diameter waste must be disposed of as general waste.

For industrial and business entities, and where certain recyclables cannot accept be accepted due to volume and space constraints, or other statutory compliances the City supports such initiatives in principle, provided that entities that do accept these recyclable materials comply with the policy and there are no additional costs to City. The following recyclables are not accepted at City-provided drop-off or diversion sites, and should be diverted to pre-identified business entities, as provided for by their industry representatives:

xii. Rubber (tyres).

ANNEXURE E: REQUIREMENTS FOR WASTE INFORMATION SYSTEM AND REPORTING WASTE INFORMATION SYSTEM REPORTING REQUIREMENTS

The specifications for the National WIS indicate that it will contain data that must be supplied by individuals and entities that generates, handle and transport waste for disposal at a landfill site.

The following are the data requirements that must be recorded and reported on:

- I. Location and name of the waste facility
- II. Name of the activity
- III. A waste information registration number
- IV. Waste management method or hazardous waste generator and
- V. The date of registration
- VI. Class and type of waste;
- VII. Quantity (mass) of waste
- VIII. Name of the waste generator and address details;
- IX. Main business activity;
- X. Class and type of waste
- XI. Quantity (mass) of waste;
- XII. Date and time of disposal;
- XIII. Name of the licensed waste disposal contractor (that will transport waste);
- XIV. Location and name of the waste disposal site.

The national waste information system for South Africa will be capturing the following information from waste disposers, recyclers and exporters:

- a. Time period (*month or year*);
- b. Quantity (*tonnes*);
- c. Waste type (national categorisation);
- d. The source from which waste come from (*waste source*);
- e. Disposer, Recycler, Exporter (waste destination).

The following table shows the specific waste categories that have been sourced from National Waste Information Regulations of 2012:

ANNEXURE F: POLICY AMENDMENT SCHEDULE

Date	Policy Version Number	Notes on Key Amendments (with Section, Page number)
April 2006	Version 1, Draft 14	Final Draft for Public Input
July 2017	Version 2, Draft	Final Draft for Public Comment
September 2018	Version 3, Draft	Draft for Public comment