

**DEPARTMENT OF ENVIRONMENTAL AFFAIRS
DEPARTEMENT VAN OMGEWINGSAKE**

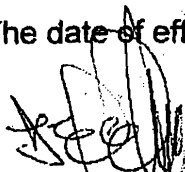
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NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (Act No. 59 of 2008) NATIONAL DOMESTIC WASTE COLLECTION STANDARDS

I, Bomo Edith Edna Molewa, Minister of Water and Environmental Affairs, hereby under section 7(1)(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) set national standards for the collection of domestic waste in the schedule hereto.

The date of effect will be 1 February 2011.



**BOMO EDITH EDNA MOLEWA
MINISTER OF WATER AND ENVIRONMENTAL AFFAIRS**

**ADDRESSING CHALLENGES WITH WASTE SERVICE PROVISION IN
SOUTH AFRICA**

NATIONAL DOMESTIC WASTE COLLECTION STANDARDS

OCTOBER 2010



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Definitions

In this document the following definitions apply unless the context indicates otherwise:

“Basic Refuse Removal Service” means a baseline service level as established under Clause 9.1 of the National Policy on the Provision of Basic Refuse Removal to indigent Households.

“Building Rubble” means waste produced during the construction, alteration, repair or demolition of any structure, and includes rubble, earth, rock and wood displaced during such a construction, alteration, repair or demolition.

“Collection” means the act of collecting domestic waste at the place of waste generation or storage by an approved service provider or the municipality.

“Collection Vehicle or Equipment” means any vehicle or equipment used in the collection of domestic waste.

“Domestic Health Care Waste” means waste generated in a household for medical purposes and includes waste such as syringes, unused medicines and pills, used bandages, etc. that could cause a health hazard when not appropriately disposed of.

“Domestic Waste” means waste, excluding hazardous waste, that emanates from premises that are wholly or mainly for residential, educational, health care, sport or recreational purposes. Domestic waste can be classified into recyclable and reusable, compostable and also non-recyclable or non-usable waste. Domestic waste for the purposes of the standards does not include commercial and industrial waste, building rubble and ‘hard’ or non-compostable garden waste.

“Hard or Non-compostable Garden waste” means branches and tree stumps that needs to be shredded in order to become compostable.

“Hazardous Waste” means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment.

“Household” means a collection of individuals staying on a distinctive property and/or premises regardless of their relationships to one another.

“Municipality” means a municipality as defined by the Municipal Systems Act, 2000 (Act No. 32 of 2000).

“Receptacle” is the container designated solely for the purpose of temporary storage of household waste at the household, either provided by the municipality or the household, until such time of collection by the service provider/municipality.

“Service Provider” means the providers of the domestic waste collection service, be it the municipality, external entity or community that is contracted by the municipality to render a municipal service.

“Standard” for the purposes of this document is a list of principles, procedures, processes and benchmarks established for ensuring that domestic waste collection services is fit for its intended purpose and performed in the manner it was intended for. The Standards further define quality and establish safety criteria.

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1 Background and purpose

To redress past imbalances in the provision of waste collection services, it is imperative that acceptable, affordable and sustainable waste collection services be rendered to all South Africans. The provision of waste collection services improves the quality of life of the entire community and ensures a clean and more acceptable place to live and work in. The lack of or poor quality waste collection services can however result in a number of environmental and human health problems.

The National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) stipulates that standards are required to “give effect to the right to an environment that is not harmful to health and well-being,” and that this right have to be applied “uniformly throughout the Republic”. It is recognised that South Africa is a developing country and the purpose of the setting of standards is to ensure a service to all while complying with health and safety regulations without unnecessarily changing current creative collection processes as long as they function well and deliver a service of acceptable standard to all households. These National Domestic Waste Collection Standards are therefore applicable to all domestic waste collection services throughout the country.

The setting of National Domestic Waste Collection Standards, was informed by the Constitution of the Republic of South Africa, 1996, the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), the General Waste Collection Standards of Gauteng Province, the current international waste management standards and good practices in both developed and developing countries, the current waste collection practices in South African municipalities as well as stakeholder consultations.

NOTE: Guidelines in support of the standards are provided in text boxes throughout the document.

2 Principles

The standards are set based on the following principles agreed upon during the consultation process:

- Equity;
- Affordability and availability of resources within municipalities;
- Clarity and ease at which the standards can be implemented;
- Practicality; and
- Community participation in design of applicable and appropriate collection systems.

3 Level of Service

It is recognised that service levels may differ between areas depending on the practicality and cost efficiency of delivering the service. However, the standards for domestic waste collection as outlined below will be equally relevant to all different levels of domestic waste collection services.

Service levels may vary between:

- a. On-site appropriate and regularly supervised disposal (applicable mainly to remote rural areas with low density settlements and farms supervised by a waste management officer);
- b. Community transfer to central collection point (medium density settlements);

- c. Organised transfer to central collection points and/or kerbside collection (high density settlements); or
- d. Mixture of b and c above for the medium to high density settlements.

4 Collection

Equitable waste collection services must be provided to all households within the jurisdiction of the municipality. In areas where travelling distances and the resulting costs may render regular waste collection services impractical, the municipality, through by-laws, must allow for more feasible alternative ways of waste handling, such as on-site disposal (refer to level of service in paragraph 3 above).

4.1 *Separation at source*

Separation at source must be encouraged and supported in line with the relevant industry waste management plans. In addition:

- a. All domestic waste must be sorted at source (i.e. the households) in all Metropolitan and secondary cities;
- b. The service provider/municipality must provide clear guidelines to households regarding types of waste, the sorting of the waste, appropriate containers, and removal schedules for each type of waste; and
- c. Community involvement in recycling must be encouraged.

4.2 *Collection of recyclable waste*

The municipality must provide an enabling environment for households to recycle domestic waste. An enabling environment could include kerbside collection and/or well-kept drop-off centres within easy reach. Where the municipality does not provide for kerbside collection of the recyclable component of source separated waste, it must co-operate with the recycling sector to ensure the provision of facilities where recyclables can be dropped-off for collection by service providers.

- a. Mainstream recyclables (paper, cardboard, newspapers, magazines, plastic, glass, metal cans and tins) must therefore, according to the level of service provided (see section 3 above), be either collected at households or from communal collection points by the municipality or service providers.
- b. Non-mainstream recyclables (electronic waste, scrap metal, batteries, fluorescent lights, used oil etc) must be routed to clearly marked drop-off centres at well advertised locations for collection by service providers in the relevant recycling sector.

Guideline for collection of recyclables

The viability of recycling relies heavily on economies of scale. It is therefore important that enough clean recyclables (from separation at source including households) must be accumulated to justify the cost of transport associated with the collection of recyclables.

The following issues must be considered:

- The use of existing infrastructure (i.e. garden waste centres, landfills) for temporary accumulation and storage of recyclable waste. This may require an amendment to existing landfill permits;
- Bulk waste transfer facilities for recyclable waste by district municipalities;
- Regionalisation of collection of recyclables to ensure economies of scale especially in remote areas; and
- Collaboration with recycling companies to avoid potential bottlenecks.
- If there is no recycling market for source separated recyclables, waste-to-energy options must be considered prior to disposal.

4.3 Receptacles

The following specifications and procedures are applicable to all receptacles for domestic waste collection (refer to the guideline box below when selecting suitable receptacles):

- a. Receptacles for the storage of non-reusable and non-recyclable waste must be easily distinguishable from those for the storage of recyclable waste;
- b. Receptacles for the storage of non-recyclable waste at households must be:
 - (i) fit for the safe storage of waste;
 - (ii) such that pollution of the environment and harm to health are prevented;
 - (iii) rigid and durable to within reason prevent accidental tipping, accidental spillage and leaking;
 - (iv) intact and not corroded or worn out;
 - (v) covered to ensure that animals and insects cannot enter and that the waste cannot be blown away; and
 - (vi) not bigger than 240ℓ;
- c. Each household supplied with a bin or wheelie bin takes responsibility for the hygiene as well as safekeeping of the bin, and must not purposely damage it or use it for any other purpose than for keeping waste until collection day;
- d. The service provider/municipality must take care to return the emptied receptacle to the same household from where it was collected for emptying;
- e. Where returnable receptacles are in use, household members must mark his or her receptacle to assist the service provider/municipality in returning the receptacle to the same household from where it was collected; and
- f. Elderly and disabled persons' households must have the choice to use smaller receptacles or bins that handle more easily than the standard bins provided by the municipality.

Guideline for selecting receptacle type.

The following must be taken into account:

Cost – Bins/wheelie bins are more costly than plastic bags, but have a longer lifespan.

Size – The size of the receptacle will be determined by the bulk (volume) of non-recyclable and recyclable waste generated by an average household in a certain area. The frequency of collection must be considered, as frequencies of less than once a week become a health hazard in South African climatic conditions. The maximum size of receptacles for a household is therefore set at 240ℓ.

Pollution – Plastic bags create an additional source of pollution if not re-used and/or recycled.

Compatibility – The receptacles must be compatible with the type of collection vehicles in use. Where applicable, and in areas where the use of wheelie bins will be feasible, wheelie bins must be phased in as and when transport vehicles that are not currently compatible with wheelie bins are replaced. However, compactor trucks may not be the best method of collection for mixed recyclables, nor for the collection of non-recyclable waste with low compaction potential.

Handling – The receptacles must be easy to handle by the household and the service provider/ municipality and must be easy to clean and have no sharp edges. However, some high density areas on steep slopes (although there are proper roads for trucks), might need other types of receptacles than areas on flat ground.

Vermin and vector control – The receptacles must be impermeable to vermin and flies. This implies that receptacles must not allow moisture or rain water to enter and must not discharge any leachate.

Durability – the receptacles must be fairly resistant to mechanical damage as well as be 'animal proof'. Various domestic and other animals may damage receptacles in search of food.

Availability – The receptacles must be freely available in the market at competitive prices (to both municipalities and consumers as the case may be).

Number of receptacles – The size of the household will determine the number of receptacles required. A fixed number can be provided per household and additional receptacles on request and possibly at a cost to the household.

4.4 Bulk Containers

Where bulk containers are the most appropriate receptacles, the same standards apply as for receptacles as stipulated above (section 4.3). In addition, bulk containers must be fitted with reflectors and where appropriate be placed next to a platform for ease of access.

A formalised domestic waste collection system must be provided to transfer the waste from individual households to the bulk containers in cases where such containers are used for domestic waste. The job creation potential (i.e. involvement of community contractors) of such a domestic waste collection systems must be optimised in favour of the local community.

Skips

It must be noted that skips are designed for collection of bulky waste such as building rubble or 'hard' garden waste which will not become windblown during transportation. Skips are therefore not appropriate for domestic waste collection unless appropriate measures are put in place to prevent windblown litter from the skips.

4.5 Communal collection points

Communal collection points must be clearly demarcated areas with appropriate receptacles where household waste can be deposited for collection by the service provider/municipality. The municipality must ensure that communal collection points are kept tidy at all times.

The receptacles must be:

- a. Covered so as to prevent windblown litter; and
- b. User friendly to allow even children and disabled persons to safely deposit waste into the receptacles.

The collection points must:

- a. Be easily accessible for waste collection vehicles; and
- b. Encourage waste separation at source.

4.6 Frequency of collection

Acknowledging that waste minimisation is encouraged, the frequency of waste collection must not encourage illegal dumping or cause a nuisance in terms of odours and volumes of waste being stored.

Non-recyclable waste must be removed at least once a week. [Also see health issues hereunder.]

Recyclable waste must be removed at least once every two weeks and removal must be coordinated with industry (the users of the recyclables) to minimise costs and the clogging of space at transfer stations and depots.

Waste deposited at communal collection points must be collected within 24 hours of receptacles being reported as full or at regular intervals so as not to attract vermin and increase health risks.

Bulk containers must be collected once filled up or within 24 hours of being reported as full, but not less than once a week.

Frequency of collection of recyclable and non-recyclable waste may differ depending on:

- a. The size of the bins provided and the volumes of waste generated;
- b. The area of collection in terms of:
 - (i) type of service provided including types of vehicles and equipment used;
 - and

- (ii) distances between collection points and disposal sites to minimise transport costs;
- c. Climatic conditions - In South Africa's hot weather conditions, the collection of non-recyclable waste less than once a week is a health hazard.

5 Drop-off centres for Recyclables

Drop-off centres for recyclables not collected at the households must be easily accessible to the public. Such centres must also be conducive to reinforcing recycling behaviour – it must be clean and user friendly. Drive-through options should be considered and implemented where feasible. Collection from drop-off centres must be at regular intervals so as not to cause a nuisance.

6 Collection vehicles

Collection vehicles that are the most appropriate for the specific task and geographical terrain must be used. See the guideline box below on selecting collection vehicles. The following shall apply:

- a. Collection vehicles, used for the collection and transportation of waste must not be used for any other purpose while collecting and transporting waste.
- b. Health issues [regular cleaning of the vehicles is required] must be considered.
- c. Waste must be collected and transported in closed vehicles (covered to ensure no windblown litter generation) to prevent littering during transportation. Non-compatible vehicles must be phased out.
- d. Maintenance schedules must be adhered to and roadworthiness of vehicles ensured where applicable in order to ensure a reliable waste collection service.

Guideline on Collection Vehicles

Collection vehicles that are the most appropriate for the specific task should be used. Consideration must be given to the following:

- (i) type of waste to be removed – recyclable or non-recyclable;
- (ii) the geographical area of collection; and
- (iii) the method of collection – e.g. whether the receptacles in use need specialised equipment to be lifted or not.

Collection vehicles used for the collection of non-recyclable waste might not be appropriate for the collection of recyclable waste. In choosing the type of vehicle for the collection of non-recyclable and recyclable waste the following must be taken into consideration:

- (i) how much each type of waste can be compacted;
- (ii) any leachate forming when compacting the waste; and
- (iii) whether different types of recyclables are collected in one receptacle at the households.

7 Health and Safety

- a. In addressing the general health of the waste collection workers, all waste collection workers must receive:
 - (i) regular medical check-ups to ensure their health and well-being;
 - (ii) appropriate personal protective equipment, e.g. gloves, masks, overalls and raincoats, gumboots; and
 - (iii) ongoing training on health and safety issues.
- b. Existing Occupational Health and Safety legislation must be adhered to.

8 Communication, awareness creation and complaints

8.1 Waste Management officer

The Waste Management Officer will be designated to deal with general communications and awareness raising regarding waste. This officer will also be responsible for the handling of all complaints and resolving such complaints within a set period, as follows:

- a. The complaint handling mechanisms will be in line with the type of municipality and availability of infrastructure to handle such complaint mechanisms;
- b. The time frame for responding to complaints is a maximum of 24 hours. The complainer must receive notification of how the complaint will be addressed within this 24 hour period;
- c. Complaints from both households and waste collectors (including service providers/ municipality) must be dealt with;
- d. Where complaints arise from negligence or lack of awareness on the part of households, communication and general awareness creation must be improved; and
- e. An efficient and effective register containing all complaints must be kept.

8.2 *Awareness creation and guidelines to inform the households*

- a. The municipality must create awareness amongst households about the following:
 - (i) the types of waste collection services provided;
 - (ii) separation at source – the removal of recyclables and re-usable waste from the general household waste;
 - (iii) the potential of composting of some of the household waste and the benefit of such to the household;
 - (iv) the unacceptability of illegal dumping and littering;
 - (v) measures to be taken against individuals that litter and dump waste illegally;
 - (vi) the cost of cleaning up illegal dumping and littering, and the implications on household waste collection rates; and
 - (vii) the advantages of reporting illegal dumping activities.
- b. The municipality must provide clear guidelines to households about the following:
 - (i) the different types of waste generated in households;
 - (ii) separation of non-recyclable and non-reusable household waste from compostable waste and recyclable waste;
 - (iii) appropriate containers for each type of waste;
 - (iv) removal schedules for each type of waste; and
 - (v) what to do with waste other than those waste forming part of the regular schedule of waste collection services.
- c. Awareness raising and guideline communications must be done at regular intervals to ensure that all households are well informed about all issues listed under (b) above.

9 **Waste Collection customer service standards for Kerbside collection**

- a. Weekly waste collection must be done on the same day every week according to the municipality's schedule.
- b. When the scheduled municipal services are interrupted for whatever reason, the municipality must resume the service as soon as is practical and address all backlogs so caused as a matter of priority.
- c. When collection has been missed the waste must be removed not later than on the next scheduled collection day.
- d. The collection team will make every effort to return the same bin to the premises of the household if bins are used as receptacles.
- e. A charge will be set for replacement of waste bins reported as:
 - (i) lost or stolen;
 - (ii) vandalized; or
 - (iii) damaged (other than by the service provider/municipality or equipment or normal wear and tear).
- f. Revised collection arrangements during the December holidays or for public holidays will be widely publicized if applicable. Residents will be informed of revised collection arrangement in advance by one or more appropriate method.
- g. A charge does not apply in the following circumstances:
 - (i) receptacles damaged by the service provider/ municipality or equipment; or

- (ii) receptacles provided to indigent households qualifying for fully rebated service.
- h. The municipality must stipulate the time at which the waste receptacle must be put out for collection on the collection day.
- i. If the waste receptacle contains unacceptable material as specified in the by-laws (such as builders rubble) the waste may not be removed.
- j. All complaints about the service must be addressed as follows:
 - (i) promptly (within the time frame specified by the municipality);
 - (ii) appropriately and realistically; and
 - (iii) efficiently and effectively.

10 General

- a. All communication to household residents must be via the waste management officer.
 - (i) waste collectors may not enter into debate with household residents;
 - (ii) waste collectors may not intimidate household residents; and
 - (iii) household residents may not intimidate or force waste collectors to collect waste which is not separated according to the guidelines or which was disposed of in contravention of a by-law or other legislation.