

VOLUME 5

SECTION 6



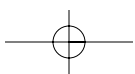
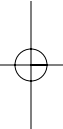
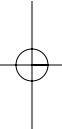
SOLID WASTE DISPOSAL IN JAMAICA

**Managed by
The National Solid Waste
Management Authority
(NSWMA)
61 Half Way Tree Road
Kingston 10**



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CHAPTER I

BACKGROUND

1.0 NATIONAL SOLID WASTE MANAGEMENT AUTHORITY

The National Solid waste Management Act (2001) mandates the NSWMA to take all necessary steps to effect the management of solid waste in Jamaica. Fulfilling this mandate facilitates action that would safeguard public health, ensure that waste is collected, stored and transported, recycled, and reused or disposed of in an environmentally sound manner. Generators of solid waste are made aware of related standards, guidelines and codes of practice endorsed by Government in implementing its national solid waste programme.

The purpose of this component of the Developers' Manual is:

- to create awareness among housing developers of their responsibilities in the proper management of solid waste generated in new housing complexes being constructed and
- to apprise them of their responsibility to ensure that the Local Authorities and the NSWMA are made aware of the size and type of development and the service that would be required.

Depending on the nature of the residential development, house-to-house collection may or may not be appropriate and hence alternatives such as skip placement may have to be explored.

The following outlines for the Developer the arrangements for solid waste collection services in new residential complexes.

1.1 COLLECTION SCHEDULES AND METHODS OF COLLECTION OF SOLID WASTE

NSWMA operates according to established collection schedules. In most instances, solid waste in the corporate area (Kingston/St. Andrew) is collected twice weekly. Where new areas for collection are identified during the Financial Year, a cost is applied to the developer to offset the collection cost. The cost to be paid is determined by the Authority in accordance with the following table:

Calculation of Cost for Household Waste Generation

Calculations are based on the following:

Average: 3.5 persons per household

Rate of Generation: = 1 kg of solid waste/person/day
(1 year = 365 days)

Disposal Cost: J\$ 2,700 per tonne per day

Tonnes Per Year: = No. of households in development complex
x 3.5 x 1 kg x 365/1000 kgs = tonnes/year

Annual Cost of Disposal: = tonnes per year x disposal cost

Amount per Household per Year = Annual cost / no. of households

CHAPTER 2

CONTAINERISATION AND STORAGE

2.0 CONTAINERIZATION

All solid waste generated from households must be properly containerized before storage and collection. The solid waste should not be in direct contact with the interior of the storage container or receptacles. The use of polyethylene bags is therefore highly recommended.

2.1 STORAGE

2.1.1 Household Storage

- The number of receptacles per dwelling unit is one (1), unless otherwise specified. The capacity of each receptacle should not be in excess of US 35 gallons (132.5 litres) (per dwelling unit).
- The receptacle should be either metal or plastic, and should not be in excess of 13.5 kg when empty.
- The receptacle should be placed at the front of the lot where it can be accessed without hindrances 24 hours per day by collection crews. Lids for the receptacles are highly recommended.

2.1.2 Communal Storage

- The number of receptacles varies, depending on the projected population of the proposed development.
- The capacity of each receptacle should not be in excess of 6.1 cubic metres (8 cubic yards), with the following dimensions:
 - Length – 1.2m (4 ft.)*
 - Width – 2.4m (8 ft.)*
 - Height – 1.2m (4 ft.)*

2.2 PHYSICAL ALLOWANCE

- The minimum physical allowance for communal receptacles is 4 cubic

metres (5.2 cubic yards).

- The receptacle should be placed in an area where it does not hinder vehicular and pedestrian traffic or cause nuisance to residents.
- The location of the receptacle should be accessed without hindrances 24 hours per day by collection crews.

The minimum required turning radius/space for collection units is 21.3m (70 ft.).

2.3 PUBLIC HEALTH

- All solid waste containers and receptacles must be structurally sound such that they safeguard against injuries, and pose no threat to the physical safety of user and collection crews.
- Areas allocated for communal receptacles should be at least 4.5 metres (14.8 ft.) away from waterways such as gullies, drains, rivers, shoreline, wetlands and so on.
- Receptacles should not be placed on any land used for productive purposes such as agriculture and livestock rearing, since emissions such as leachate could compromise the integrity of the environment and cause a public health nuisance.

2.4 COLLECTION OF GARDEN CUTTINGS

- A maximum of **two (2) bags** of garden cuttings **per household** per collection day will be collected from residents. Please note that garden waste **MUST** be bagged.
- Only cuttings that do not obstruct the compaction mechanism of the truck are collected. Larger cuttings such as tree trunks are **NOT** the responsibility of the Authority, **NOR** are they to be placed in the compactors for normal collections.

CHAPTER 3

ACCESS

3.0 ACCESS TO RECEPTACLES

- i All household receptacles should be placed at the front of the residential lots unless otherwise specified by the National Solid Waste Management Authority (NSWMA).
- ii Restriction apparatus such as bolts, locks and so on that are placed on receptacles, gates etc. must be removed prior to the scheduled collection time, to allow easy access and egress by collection crews. Unless special arrangements are made, NSWMA will not be responsible for waste that is inaccessible to its crew from outside the premises.
- iii Access within the development complex and to areas designated for communal receptacles should be free from all hindrances such as utility wires, open sewers, trenches, lateral drains, fire hydrants, telephone distribution cabinets, traffic control module stations and so on.
- iv Where development consists of pathways, collection will not take place beyond 5 metres (16.4 ft.) of the disposal area.
- v Residents and occupants of units beyond the 5-metre (16.4 ft.) stipulation are expected to take the bagged solid waste to the end of the pathway where it intersects with the roadway so that it could be collected.

3.1 ROAD WIDTH

Minimum width of the road to access receptacles should be 2.5 metres (8.2 ft.) so that the collection vehicles can drive through.

3.2 MANOEUVRING SPACE

Minimum turning radii for collection vehicles is 6 metres (19.7 ft.). Therefore roads, intersections and cul-de-sacs within the development complex must be such that they are twice the turning radius. The layout of the development complex should be of such that each housing block is accessible for waste collection.

CHAPTER 4

OFFICIAL PROCEDURES

4.0 PROCEDURES

- i The developer is required to submit a letter of application to the NSWMA (Planning and Research Department), requesting collection services for new/existing housing developments.
- ii The written application must be submitted along with supporting drawings of the layout of the development.
- iii The major components of the letter should state:
 - The number of units from which waste is to be collected
 - The types of units (apartments, townhouses, multifamily etc.)
 - The gradient of the roads
 - The height of the electric wires – trucks are faced with the problem of low wires in communities on several occasions
 - The type of receptacle that will be provided or used by the residents (bags, drums, skips etc.)
 - A delineated description of the boundary of the development
- iv Along with the letter of application, NSWMA requests a copy of the subdivision or a plan view layout of the particular development. In the case of a central storage area the location of such an area must be shown.
- v After the plan and the letter of application are reviewed, a site visit is made by the designated NSWMA representatives, to analyze the condition of the road (whether paved or unpaved), and to check if the other components of the application are present.

4.1 FINANCIAL RESPONSIBILITY

- i If the development has been approved for collection by NSWMA, a cost assessment for the collection is done.
- ii Initial cost and subsequent costs for service will be borne by the developer/householder until the development has been legally registered

with the Inland Revenue Department on its Property Tax Roll.

- iii Once the development has been placed on the property tax roll in keeping with approved legislation, property taxes for which the owner/s of the units (developer or occupants) are liable, must be remitted annually to the tax collectorate (Inland Revenue Department) prior to commencement of collections. This conditionality must be included in the tenancy agreement.

4.2 CONTACT INFORMATION

For further information please contact:

National Solid Waste Management Authority
The Director of Operations
61 Half Way Tree Road, Kingston 10
Telephone: (876) 926-3988/8559/5170
Fax: (876) 920-1415