

45.0 Waste Management Unit

45.1 Introduction

A hospital must have a Waste Management Unit for storing waste and used linen. The Waste Management Unit shall have the following features:

- Located close to all functional areas
- Accessible from within the unit and externally
- Fitted with a deadlock
- Located away from food and clean storage areas
- Not accessible to the public.

45.2 Planning

45.2.1 Functional Areas

The Waste Management Unit will include the following Functional Areas:

- Enclosed dust free workstation with a workbench, telephone and computer outlet to undertake recording and reporting functions; it should have visual control of the waste handling facility
- General dry waste skip or compactor area with direct contractor access for removal; general waste may be compacted on site
- General wet waste holding area
- Loading Dock and area with provision for front load bins
- Clinical waste holding and cool room
- Paper and recyclable materials collection
- Clean bin storage area; a variety of bins need to be stored pending distribution to the hospital units
- Storage space for consumables such as plastic bin liners and cleaning materials; could be located adjacent to the Work Management Station.

The following Functional Areas are optional requirements:

- An area for bin receiving with room for pull tug and cart trolley access and bin sorting may be required.
- A waste weighing and recording station, which includes a floor level digital weighbridge and bar code recorder, will be required if waste handling policy includes weighing and tracking.
- An upright freezer may be required to store tissue pending dispatch for incineration.

Bulk Waste Movement

The waste handling area will be frequently serviced by site and contractor's vehicles removing waste in carts and front loading bulk bins. It is important that adequate traffic access is provided for delivery and removal of all wastes. The access roads need to be adequate and turning areas uncongested. Noise levels may be significant during waste collection periods.

Bulk waste bin movement around the site and during the disposal process may require that the bins are accessed from a raised dock. A variable level platform may be considered as an option.

Clinical Waste

Contaminated waste bins should be located in strategic collection points for each clinical section. These collection points need to be easily accessible to the staff responsible for disposing of wastes, as well as to those servicing the facility in removing and replacing the bins. Clinical waste bins are collected and held in an air conditioned room or cool room in the Waste Holding area for removal by external contractors.

Contaminated waste bins should not be accessible to the public and should preferably be out of sight in a secure area.

Separate color-coded bins will be required for the disposal of sharps, human tissue, cytotoxic and radioactive materials.

Human tissue, cytotoxic and radioactive materials are only likely to occur in specific clinical units. Provision of receptacles and storage space for these materials will be required in the specific unit on an as-needed basis.

45.3 Design

45.3.1 *Functional Relationships*

Servicing of waste and linen storage areas should be undertaken via thoroughfares that avoid regular public, patients and staff facilities. Particular attention should be made to avoiding food handling and high profile public areas. A service lift devoted to materials movement within the hospital is highly recommended.

General

The Waste Management Unit should be designed to secure the material, reduce organic decomposition, contain odors and allow hygienic cleaning of storage areas and carts. Larger institutions may benefit from the installation of a mechanized bin washing facility. Liquid waste emanating from disinfection procedures may need to be stabilized before disposal in sewerage systems.

Infection Control

Walls and floors in areas used for bin storage should be sealed to allow easy cleaning. Hand-washing facilities should be located adjacent to the waste collection area where clinical waste is handled.

Building Service Requirements

Building service requirements for the Waste Management Unit will include the following:

- The temperature with the waste handling area should be maintained at a temperature that helps control odors; ideally a negative pressure environment should be provided to contain the spread of odors.
- The areas used to store waste materials need to be secure from vermin and rodent infestation.
- Hot and cold water outlets with a hose spray are the minimum requirements to be provided for cleaning waste holding areas and bins as required
- A high pressure wash down unit should be provided for the adequate cleaning of the area.
- Drainage from this area may include disinfectants; therefore liquid wastes may require special treatment prior to discharge.
- Walls and floors should be sealed to withstand the frequent wash downs and the floors graded to allow run off.

45.4 Components of the Unit

45.4.1 *General*

The Waste Management Unit will contain a combination of Standard Components and Non-Standard Components. Provide Standard Components to comply with details in the Standard Components described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets.

45.4.2 *Non-Standard Components*

Introduction

Provide the Non-Standard Components as identified in this section and in the Schedule of Accommodation, according to the Operational Policy and Functional Brief.

Bin Washing Area

Description and Function

The Bin Washing Area will provide an area and facilities for washing of bins as required. Bins may be cleaned offsite by external waste removal contractors.

Considerations

Hot and cold water outlets with a hose spray are the minimum requirements to be provided for cleaning bins as required. Reticulated steam, pressure cleaning systems and air blow drying facilities may also be considered.

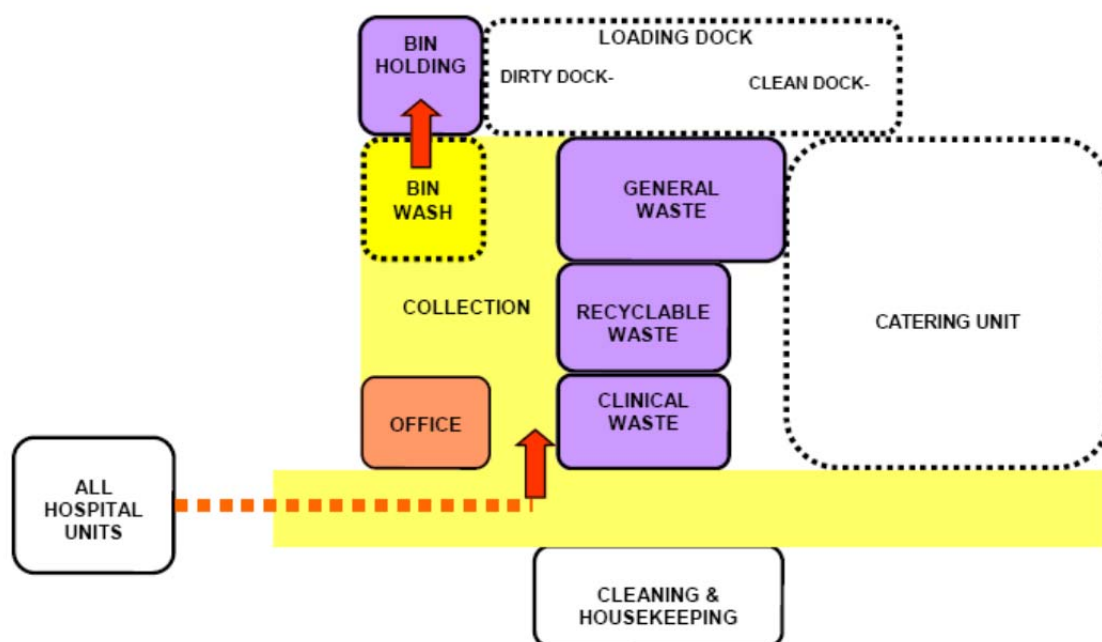
45.5 Schedule of Accommodation

Typical Waste Management Unit at levels 3 to 6

ROOM/ SPACE	Standard Component				Level 3/4 Qty x m ²			Level 5/6 Qty x m ²			Remarks
Loading Dock - Shared											
Loading Dock	LODK-SJ				1	x	0	1	x	0	External Area under cover; clean and dirty zones
Waste Handling											
General Waste Hold	WACO-SJ Similar				1	x	75	1	x	150	Including general wet and dry waste; size depends on size of facility
Clinical Waste Hold	DISP-8-SJ Similar				1	x	100	1	x	200	Includes sharps bins; air-conditioned; size depends on size of facility
Flammable/ Chemical Waste Hold	STFL-SJ Similar				1	x	9	1	x	40	Size depends on amount of material to be stored
Recycled Waste Hold	WACO-SJ Similar				1	x	40	1	x	80	Paper, cardboard, plastics etc
Bin Washing					1	x	10	1	x	20	Bin washing may be done off-site
Clean Bin Holding	DISP-8-SJ Similar				1	x	15	1	x	30	Includes sharps bins
Staff Areas											
Office - Manager	OFF-S9-SJ Similar				1	x	12	1	x	12	
Office - Supervisor	OFF-S9-SJ							1	x	9	Qty depends on staff numbers
Office - Workstation	OFF-WS-SJ				1	x	5	1	x	5	Administrative & Clerical support staff
Interview/ Meeting Room	MEET-9-SJ				shared			1	x	9	
Meeting Room	MEET-L-15-SJ Similar				shared			1	x	20	May share with an adjacent Unit
Staff Room	SRM-25-SJ				shared			1	x	25	May share with an adjacent Unit
Toilet - Staff	WCST-SJ				2	x	3	2	x	3	May use general staff change/ toilet facilities if located close
Net Department Total					272.0			606.0			
Circulation %					20			20			
Grand Total					326.4			727.2			

Notes:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the FPU
- Rooms indicated in the schedule reflect the typical arrangement according to the Role Delineation
- Exact requirements for room quantities and sizes will reflect Key Planning Units identified in the Service Plan and the Operational Policies of the Unit
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit
- Office areas are to be provided according to the Unit role delineation and staffing establishment; Executives and Managers may be responsible for more than one area but should have only one office assigned within the campus
- Staff and support rooms may be shared between Functional Planning Units dependent on location and accessibility to each unit and may provide scope to reduce duplication of facilities.

45.6 Functional Relationship Diagram

45.7 Further Reading

- Australasian Health Infrastructure Alliance (Aus.). '*Australasian Health Facility Guidelines*'. Retrieved from website: www.healthfacilityguidelines.com.au 2014
- The Facility Guidelines Institute (US). '*Guidelines for Design and Construction of Health Care Facilities*' 2010 Edition. Retrieved from website: www.fgiguideines.org 2014.