

# **Waste Management In Commercial/Industrial Developments**

## **During Construction**

During construction the following typical waste generation rates can be applied for commercial/industrial premises:

<b>Building Type</b>	<b>Timber</b>	<b>Concrete</b>	<b>Bricks</b>	<b>Plaster - board</b>	<b>Sand/ Soil</b>	<b>Metal</b>	<b>Other</b>
Factory per 1000m <sup>2</sup>	0.25	2.10	1.65	0.45	4.80	0.60	0.50
Office Block per 1000m <sup>2</sup>	5.10	18.8	8.50	8.60	8.80	2.75	5.0

## **Facilities/Ongoing Management**

### **Commercial/Industrial Waste Storage Area Specifications:**

Waste/recycling storage areas must be integrated into the design of the overall development and must be located and designed in a manner that reduces adverse impacts upon neighbouring properties and the streetscape. All waste/recycling storage areas are to be constructed:

- 1) Of an adequate size to comfortably accommodate all general waste bins and recycling bins associated with the development, including any waste reduction equipment;
- 2) With the gradient of floors and the gradient of any associated access ramps to be sufficiently level so that access for the purpose of emptying containers can occur in accordance with WorkCover NSW Occupational Health and Safety requirements;
- 3) With a smooth, durable floor and must be enclosed with durable walls/fences that extend to the height of any containers kept within;
- 4) With doors/gates to the storage area to be openable from both inside and outside the storage area and wide enough to allow for easy passage of waste/recycling containers;
- 5) With a hot and cold water supply provided through a centralized mixing valve. The hose cock must be protected from the waste containers and must be located in a position that is easily accessible when the area is filled with waste containers;
- 6) With the floor appropriately graded so that any water is directed to a Sydney Water approved drainage connection located upon the site;
- 7) With clear signage that clearly describes the types of materials that can be deposited into recycling bins and general garbage bins;
- 8) With convenient access from each tenancy to the waste/recycling storage area(s) and step free access between the point at which bins are collected/emptied and the waste/recycling storage area(s);
- 9) To allow access by collection vehicles used by the nominated contractor (collection vehicles should be travelling in a forward direction at all times while servicing bins), and;
- 10) With the access driveways to be used of sufficient strength to support such vehicles.

### **Operational Management:**

Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas. Details of the on going management of waste should be submitted as part of the development application and should include the following details,

- Number and size of bins to be used in the development, including any waste reduction equipment,
- Person(s) responsible for the ongoing maintenance and cleaning of the waste storage area(s),
- Proposed collection methods (including location, truck paths, frequency of collections, etc).
- How individual tenants will be expected to manage/transport their waste to the waste storage area.

### **Bin & Truck Sizes:**

**Trucks:** Most collection vehicles classify as heavy rigid vehicles (HRV's), however this may vary between contractors. When considering collection vehicle access to bin storage areas, access should be assessed for a HRV.

**Bins:** Bin types and sizes will also vary between contractors. When considering the type and size of bins you will need, consider the expected number of waste collections per week and the estimated waste generation rates for the development.

### **Waste/Recycling Generation Rates:**

The following standard waste generation rates can be used to estimate waste volumes from the development.

Type of premises	Garbage generation	Recycling generation
<b>Food premises</b>		
Butcher	80L/100m <sup>2</sup> floor area/day	Information not available
Delicatessen	80L/100m <sup>2</sup> floor area/day	Information not available
Fish shop	80L/100m <sup>2</sup> floor area/day	Information not available
Greengrocer	240 L/100m <sup>2</sup> floor area/day	120L/100m <sup>2</sup> floor area/day
Restaurants	660L/100m <sup>2</sup> floor area/day	130L/100m <sup>2</sup> floor area/day
Supermarkets	660L/100m <sup>2</sup> floor area/day	240L/100m <sup>2</sup> floor area/day
Takeaway	80L/100m <sup>2</sup> floor area/day	Information not available
<b>Retail (non-food sales)</b>		
Shops with less than 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day	25L/100m <sup>2</sup> floor area/day
Shops with over 100m <sup>2</sup> floor area	50L/100m <sup>2</sup> floor area/day	50L/100m <sup>2</sup> floor area/day
Showrooms	40L/100m <sup>2</sup> floor area/day	10L/100m <sup>2</sup> floor area/day
Hairdresser	60L/100m <sup>2</sup> floor area/day	Information not available
<b>Other</b>		
Backpacker accommodation	40L/occupant/week	20L/occupant/week
Boarding house/guesthouse	60L/occupant/week	20L/occupant/week
Offices	10L/100m <sup>2</sup> /day	10L/100m <sup>2</sup> /day
Hotel	5L/bed/day 50L/100m <sup>2</sup> floor area/day 660L/100m <sup>2</sup> dining area/day	50L/100m <sup>2</sup> of bar and dining areas/day
Licensed club	50L/100m <sup>2</sup> floor area/day	50L/100m <sup>2</sup> of bar and dining areas/day
Motel (without public restaurant)	5L/bed/day 660L/100m <sup>2</sup> dining area/day	1L/bed/day

Source: Appendix A, Better Practice Guide For Waste Management In Multi Unit Dwellings 2007

**For any further information please contact Council's Waste Management Project Officer on Ph: 9762 1112**