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WASTE MANAGEMENT PLAN

JULY 2008

AUSTRALIAN RED CROSS BLOOD SERVICE

17 O'RIORDAN STREET, ALEXANDRIA

**PREPARED FOR GOODMAN INTERNATIONAL LIMITED
FOR SUBMISSION TO DEPARTMENT OF PLANNING**



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1.0 INTRODUCTION

Goodman International Limited (Goodman) proposed to construct a new purpose built medical facility for Australian Red Cross Blood Service at 17 O’Riordan Street, Alexandria. This waste management plan is an operational waste management plan and will address the operational phases of the development. A Construction Waste Management Plan has been prepared by BuildCorp for the construction stage of the development.

The plan outlines measures to achieve the following purposes:

- Avoid the generation of unnecessary waste;
- Minimising the quantities of wastes generated ending up as landfill;
- Recovering, reusing and recycling waste generated on site where possible;
- Compliance with any codes and policies that may apply to the development.

The project consists of the following:

- Demolition of all existing buildings and structures on the site;
- Construction of a new four storey building containing:
 - A new purpose-built medical laboratory, research and development facility, ancillary office/administration and warehouse and distribution functions having a total gross floor area (GFA) of approximately 13,500 sqm;
 - Single level basement car parking; and
 - Landscaping of the site.

Each section of this development has been examined individually within this report; however, the waste management process must be effectively coordinated between all sections for the system to work.

All figures and calculations are based on drawings and information as advised by *Goodman International* and shown on architectural drawings. Calculations have been made taking into account typical waste generation calculation information using industry standard rates.

All waste facilities and equipment are to be designed and constructed to be in compliance with Sydney City Council Codes, BCA, Australian Standards and Statutory Requirements.

2.0 GENERATED WASTE VOLUMES

This assessment of waste volumes is an estimate only and will be influenced by the development's management and occupant's attitude to waste disposal and recycling. We have based our calculations on a seven- (7) day operating week for the all areas.

2.1 Operations Centre

Using standard industry waste generation rates, the total waste generated by the commercial section of the development can be calculated as follows:

WASTE GENERATION RATES Operations Centre

OPERATIONS	Waste Generation Rate	
NLA Area (m ²)	12,395	
General Waste (L/day)	1,240	10L/100m ² /day
Recyclable Waste (L/Day)	1,240	10L/100m ² /day

Rates have been tabled from Sydney City Council's Policy for Waste Minimisation in New Developments.

3.0 WASTE MANAGEMENT RECOMMENDATIONS

3.1 General Waste

Administration Areas

Waste generated will be separated on site by the occupying tenants of the administration areas of the development into the following streams using appropriate storage containers:

- General Waste (Garbage);
- Containers (PET, aluminium, glass etc.);
- Security Shredding Paper;
- Cardboard and paper recyclables.

All office areas and amenity areas will be provided with suitable garbage storage containers including individual workstations.

At the end of the day or as is deemed appropriate, staff from the tenancy will transport the waste to the refuse storage area located adjacent to the loading dock areas and place it in the general waste bins provided. The transportation will be carried out by the contracted cleaners or staff for the development for the development using a suitable means of transport such as a trolley. All general waste will be transported in sealed garbage bags to reduce odours using a trolley.

Each workstation and office area plus showroom areas will be provided with a suitable general waste bin in the vicinity of 20L capacity for storage of all garbage.

The method for storage and transportation of waste from the individual administration areas will be determined by the cleaning contractors engaged by the tenants.

Warehouses

It is recommended that the warehouse/storage areas be responsible for their own in house storage of both general waste and recyclable material. Each afternoon or evening or as appropriate, the staff from the warehouse/storage areas will transport the waste to the appropriate general and recyclable waste containers and place the waste in the containers provided for collection purposes. These containers will be conveniently located for ease of access around the development site and will be easily identified so that general and recyclable waste is placed in the appropriate collection container. The proposed location of bins will be adjacent to the loading dock areas.

Medical/Laboratory Waste

A specialised contaminated medical/hazardous waste contractor will be engaged to remove any contaminated medical waste as required as required and disposed of by means approved by the NSW EPA. Clinical waste must be stored in appropriately colour-coded containers, and clearly labelled according to the NSW Health Waste Management Guidelines for Health Care Facilities, 1998. At all times, there must be a clear physical separation of clinic and related wastes from garbage and recyclable waste.

All sharps medical waste must be stored in appropriate impenetrable sealed containers.

3.2 Recyclable Waste

Administration Areas

Dedicated paper recycling bins both for general paper recycling and for security document storage will be provided adjacent to photocopying facilities for easy access and to promote recycling by staff. Any additional cardboard boxes shall be stored at each area and will be removed by cleaning staff, as required. Cardboard boxes will need to be flattened by tenants to assist in transportation.

An additional bin for any container recycling generated by the development shall be provided in amenity areas such as staff rooms or kitchen areas.

All recyclable waste will be transported to the refuse room on Basement Level and emptied into the dedicated recycling bins provided.

Any security documents will be stored and collected as required by tenants by a specialized contractor.

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It is recommended that the warehouse/storage areas be responsible for their own in house storage of both general waste and recyclable material. Each afternoon or evening or as appropriate, the staff from the warehouse/storage areas will transport the waste to the appropriate general and recyclable waste containers and place the waste in the containers provided for collection purposes. These containers will be conveniently located for ease of access around the development site and will be easily identified so that general and recyclable waste is placed in the appropriate collection container. The proposed location of bins will be adjacent to the loading dock areas.

3.3 External Collection of Waste

Operations Centre

All waste will be collected by a nominated private waste contractor. The private collection vehicle will collect all waste from the loading dock that is accessed off O'Riordan Street. The development allows the collection vehicle to enter and exit the site in a forward direction due to the separate entry and exit access ways.

It is recommended that all waste be collected on a twice-weekly collection basis. However, this should be closely monitored and the collection frequency varied to suit the needs of the various tenants.

All medical waste will be collected as required by an approved medical waste contractor.

3.4 Waste Caretaker

It is strongly recommended that a waste caretaker be employed to manage the garbage system of this development. This task is normally included in the functions for the cleaning sub-contractor for the development.

The caretaker's duties would include the following:

- ◆ Generally maintaining and cleaning the garbage area. (Recommended at least once per week)
- ◆ Organising, maintaining and cleaning the general and recycled waste holding areas.
- ◆ Sorting recycled waste into appropriate receptacles.
- ◆ Organising for both Garbage and Recycled Waste pick-ups as required.

4.0 WASTE EQUIPMENT RECOMMENDATIONS

The following waste equipment and quantity recommendations have been made based on expected waste generation quantities.

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4.1 Operation Centre

General Waste

It is recommended that 3m³ skip-type containers be utilised for the storage of all general waste.

Qty. Required –

2 x 3m³ skip-type containers for general waste

These bins will be collected on a twice-weekly collection cycle by the nominated private waste contractor.

Recyclable Waste

It is recommended that 3m³ skip-type containers be utilised for the storage of all general waste.

Qty. Required –

2 x 3m³ skip-type containers for recyclable waste

These bins will be collected on a twice-weekly collection cycle by the nominated private waste contractor.

All bins will be colour-coded with appropriate signage to differentiate waste streams.

Any security paper removal bins will be supplied by the appropriate contractor engaged to perform the collection. Normally one (1) 240L bin for the office areas will be provided.

All medical waste container requirements will be determined by the tenant and the engaged appropriate medical waste contractor.

5.0 GARBAGE & COLLECTION AREAS

There is a dedicated refuse storage area located adjacent to the loading dock area of the development for the storage of all waste generated. A nominated private waste contractor will collect all waste on a twice-weekly collection cycle from the loading dock area accessed off O’Riordan Street. Please refer to the DA drawings prepared by *Bligh Voller Nield Architects*, for the location of the proposed refuse storage area.

Construction of all garbage and refuse areas is to meet all requirements set out in Sydney City Council Codes, BCA and Australian Standards. Waste generation rates used are based on previous experience and industry standards.

It is recommended that the waste management system be monitored in the initial stages to ensure that sufficient bins have been provided to handle the waste generated. The bin numbers above are only an approximate and the number of bins provided and collection frequency will need to be monitored and adjusted to suit the needs of the individual tenants. Also, the bin size above is only a recommendation. Tenants may nominate an appropriate bin size to suit their needs.

It is recommended that an adequate traffic management plan and waste collection procedure be prepared in consultation with the proposed waste management contractor to ensure the safe removal of waste from site at all times can be achieved.