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WASTE MANAGEMENT PLAN

SEPTEMBER 2010

ABODE HOTEL, BLACKTOWN

**PREPARED FOR AMALGAMATED HOLDING LIMITED
FOR SUBMISSION TO BLACKTOWN CITY COUNCIL**



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1.0 INTRODUCTION

The waste management plan to follow pertains to the proposed Abode Hotel. This waste management plan is an operational waste management plan and will address the operational phases of the development. A Construction Waste Management Plan will need to be prepared by the contractor engaged 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.

For the purpose of this report the proposed development will consist of three (3) primary sections as follows:

- **Hotel** – Proposed hotel accommodation on Level 1 and 2 with a total of 122 rooms.
- **Bar & Dining areas** – Proposed bar area of 126m² & dining area of 208m² located on ground level of the Hotel plus
- **Meeting / Conference areas** – Proposed meeting / conference room areas of approximately 413m² on ground floor level.

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 room numbers as advised by our client and shown on architectural drawings. Calculations have been made taking into account typical waste generation calculation information and information supplied in Blacktown City Council's Development Control Plan 2006. However, consideration has been given to industry waste generation rates and previous experience with similar developments.

All waste facilities and equipment are to be designed and constructed to be in compliance with Blacktown 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 developments management and staff attitude to waste disposal and recycling. We have based our calculations on a seven- (7) day operating week. Figures could be affected however, by hotel occupancy rates.

2.1 Hotel Accommodation

Using standard waste generation rates, the general waste generated by the hotel section of the development can be calculated as follows:

Hotel Accommodation - General Waste

Location	Net Area/Occupancies	General Waste Generation Rate		General Waste Generated	
Hotel	122	5	L/occupancy/day	610	L / Day
Totals				610	L/Day

Using standard waste generation rates, the recyclable waste generated by the hotel section of the development can be calculated as follows:

Hotel Accommodation - Recyclable Waste

Location	Net Area/Occupancies	General Waste Generation Rate		General Waste Generated	
Hotel	122	1	L/occupancy/day	69	L / Day
Totals				69	L/Day

2.2 Bar & Dining Area

Using standard waste generation rates, the general waste generated by the Bar / Dining section of the development can be calculated as follows:

Bar & Dining Areas - General Waste

Location	Net Area	General Waste Generation Rate		General Waste Generated	
Dining Area	208m ²	10	L/1.5m ² /day	1386	L/Day
Bar	126m ²	50	L/100m ² /day	63	L / Day
Totals				1449	L/Day

Using standard waste generation rates, the recyclable waste generated by the Bar / Dining section of the development can be calculated as follows:

Bar & Dining Areas - Recycling Waste

Location	Net Area	General Waste Generation Rate		General Waste Generated	
Dining Area	208m ²	50	L/100m ² /day	104	L/Day
Bar	126m ²	50	L/100m ² /day	63	L / Day
Totals				167	L/Day

2.3 Meeting / conference rooms

Using standard waste generation rates, the general waste generated by the meeting / conference rooms section of the development can be calculated as follows:

Meeting / Conference rooms - General Waste

Location	Net Area	General Waste Generation Rate		General Waste Generated	
Hotel	413	10	L/100m ² /day	41.3	L / Day
Totals				41	L/Day

Using standard waste generation rates, the recyclable waste generated by the meeting / conference rooms section of the development can be calculated as follows:

Meeting / conference rooms - Recycling Waste

Location	Net Area	General Waste Generation Rate		General Waste Generated	
Hotel	413	10	L/100m ² /day	41.3	L / Day
Totals				41	L/Day

3.0 WASTE MANAGEMENT RECOMMENDATIONS

3.1 General Waste

Hotel Accommodation

It is proposed that the waste generated from the hotel rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated general waste compactor unit or bins provided within the loading dock garbage storage room.

Transportation of waste will be carried out by staff or building management engaged for the development.

Bar /Dining

It is proposed that the waste generated from the bar & dining rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated general waste compactor or bins provided within the loading dock garbage storage room.

Transportation of waste will be carried out by staff or building management engaged for the development.

Meeting / Conference rooms

It is proposed that the waste generated from the these rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated general waste compactor or bins provided within the loading dock garbage storage room.

Transportation of waste will be carried out by staff or building management engaged for the development.

3.2 Recyclable Waste

Hotel Accommodation

It is proposed that the waste generated from the hotel rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated recyclable waste bins provided within the loading dock level waste storage room. Any plastic and glass recyclables will be stored within 240L mobile garbage bins for collection and paper / cardboard in 1000 ltr mobile plastic bins.

Transportation of waste will be carried out by staff or building management engaged for the development.

Bar /Dining

It is proposed that the recycling waste generated from the bar & dining rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated recycling waste bins provided within the loading dock garbage storage room.

Transportation of waste will be carried out by staff or building management engaged for the development.

Meeting / Conference rooms

It is proposed that the recycling waste generated from the these rooms be collected internally and stored back of house until it is transported daily or as required via the lifts to Lower Ground Level and is deposited into the dedicated general waste compactor or bins provided within the loading dock garbage storage room.

Transportation of waste will be carried out by staff or building management engaged for the development.

3.3 External Collection of Waste

Hotel Accommodation

Hotel waste will be collected by a nominated private waste contractor. The collection vehicle will collect all waste from the loading dock on Lower Ground Level.

Bar /Dining

Hotel waste will be collected by a nominated private waste contractor. The collection vehicle will collect all waste from the loading dock on Lower Ground Level.

Meeting / Conference rooms

Meeting room waste will be collected by a nominated private waste contractor. The collection vehicle will collect all waste from the loading dock on Lower Ground Level.

3.4 Waste Management Staff

It is strongly recommended that dedicated staff be employed to manage the garbage system of this development. Further more, it is also strongly recommended that part time staff also be trained to manage the system in the full time staffs absence, i.e. on weekends and Public Holidays when the waste generation is expected to peak.

The waste staff duties would need to include the following:

- ◆ Generally maintaining and cleaning the garbage room. (Recommended at least once per week)
- ◆ Organising, maintaining and cleaning the general and recycled waste holding areas. Due to the nature of the waste it is recommended that in addition to cleaning, the garbage rooms be deodorised (**recommended at least once per week**).
- ◆ Sorting recycled waste into appropriate receptacles if required.
- ◆ Organising for both Garbage and Recycled Waste pick-ups as required.
- ◆ Transporting appropriate waste containers between garbage rooms and collection areas to coincide with collection cycles and vice versa.
- ◆ Assisting with the emptying of bins during collection.

3.5 Organic Waste

It is recommended that all organic waste be handled and managed by the personnel responsible for maintaining all landscaped areas.

4.0 WASTE EQUIPMENT RECOMMENDATIONS

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

4.1 Hotel Accommodation / Bar & Dining areas

General Waste

Based on the previously stated waste generation, our recommendations for waste handling equipment are as follows:

General Waste – Macapak 800 Small Stationary Compactor, as manufactured and installed by JD MacDonald complete with 2m³ front lift or rear lift compactor container complete with a 240L bin lifter.

Qty Required – One (1) Macapak 800 Stationary Compactor with 240 ltr bin lifter & 2 x 2m³ compactor containers on castors.

General Waste	14,700/ week
Collections/Week	3
Compaction	3:1
Compacted Waste	4900L
No. of 2000L Bins	1 per collection

Recyclable Paper Waste – 1000 litre plastic mobile garbage bins

**Qty Required – One (1) 1000 litre plastic mobile garbage bin
Collected weekly or as required**

Recyclable Plastic/Glass Waste – 240L bins will be provided for storage of plastic and glass to be collected from the loading dock storage room at Lower ground level. It is recommended that five (5) bins be provided to be collected on a weekly basis or as required. These will be stored in the Lower ground garbage storage room.

**Qty Required – five (5) 240 litre plastic mobile garbage bin
Collected weekly or as required**

5.0 GARBAGE ROOMS & GARBAGE AREAS

Space has been allocated for a garbage rooms for each section of the development. Floor plans of the garbage rooms are included on the DA drawings submitted with this application. The Hotel garbage room is located on the Lower Ground Floor Level. A private waste contractor will collect general waste three times per week and recyclable waste on a weekly collection cycle. Collection will occur from the loading dock on Lower Ground Level.

Construction of the garbage room is to meet all requirements set out in the Blacktown City Council Codes, BCA and Australian Standards. Waste generation rates used are based on previous experience, industry standards and based on similar scale of the development.

The proposed waste management strategies detailed on the architectural drawings issued with this submission, outline the most efficient and effective method of separating and storing, transporting and collecting waste and recyclable material. The system allows for convenient methods for staff or building management to transport and store waste.

Following our review of the documentation to date, it is our opinion that the proposed development is deemed to be generally compliant with relevant codes and standards, in order to allow for the movement & collection of waste as is appropriate.

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 Hotel. Also, the bin size above is only a recommendation. The Hotel may nominate an appropriate bin size to suit their needs.