

WASTE MANAGEMENT PLAN (WMP) FOR OPERATIONAL WASTE

GENERAL WASTE AND RECYCLABLE WASTE DA SUBMISSION

Alex Avenue Primary School (AAPS)

Pelican Road, Schofields

Blacktown

Blacktown Local Government

DOCUMENT NUMBER

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Alex Avenue Primary School
Pelican Road, Schofields

WASTE MANAGEMENT PLAN

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Alex Avenue Primary School

WASTE MANAGEMENT PLAN OPERATIONAL WASTE

PART 1 - GENERAL

.01 Executive Summary

Alex Avenue Primary School sits on the corner of Pelican Drive and Farmland Drive. The new School is proposed to accommodate up to 1000 students.

The waste produced and the actual floor space available will need to be managed in order to facilitate the internal management of waste, as follows:

- Minimize the number of collections.
- Minimize the volume of waste to be collected
- Segregate the waste
- Recycle the waste

In line with the type of development being proposed, being one Primary School, there will be one waste management system in place.

Waste (general and recyclable/ comingled waste) will be initially collected in small bins placed throughout the school. The caretaker will collect and transport this waste to the central waste bins located on school grounds and near Farmland Drive.

The truck will enter the site from Farmland Drive. The loading area will be level. The waste will be collected from there by a private collection contractor on a regular basis. Refer to the traffic consultant's report for swept path diagrams. Any other waste will be taken away in a large 3000L bin in a yearly clean up and by separate arrangement.

Basic requirements for waste handling facilities are as follows:

- To be of adequate size.
- Integrated with building design and site landscaping.
- Suitably screened from public areas.
- With appropriate access for collection.
- Assurance that OH&S requirements for waste contractors are met.

This report describes the waste management system proposed for the project, including:

- Estimates of waste quantity
- Waste space allocation & equipment
- Management of waste
- Waste segregation and minimization procedures
- Access

Regulations

This report has been prepared based on the Blacktown City Council DCP 2015 Part G the Council Waste Management guidelines for new Development Applications. It also makes reference to the NSW Office of Environment & Heritage “Model Waste Not DCP Chapter 2008” for waste and recycling generation rates.

All waste stores will be fitted out to meet Building Code of Australia and Council requirements.

As Council does not provide waste rates for schools, discussions were held with a waste collection provider to obtain estimated volumes. Reference was also made to a similar school.

PART 2 – WASTE VOLUME ESTIMATES

.01 Access

Waste (both general and recyclable/ comingled waste) will be initially collected in small bins placed throughout the school. The caretaker will collect and transport this waste to the central waste bins located on school grounds and accessed off Pelican Drive.

The loading area will be level. The waste will be collected from there by private collection contractors on a regular basis. Any other waste will be taken away in a 3000 L skip in a yearly clean up and by separate arrangement.

.02 Waste Generation Schedule & Estimate of Waste Volumes

Background

- Number of students – proposed = 1000

Findings from Quakers Hill Public School (QH)

- Number of students = 703 (JS is 1.43 larger)
- Small bins used throughout to collect waste
- Larger bins (240 L) used near the canteen and the playground
- Caretaker collects this waste on a regular basis (eg. daily) and transports it on a trolley to the main waste area

- **General waste** = 1x skip collected 2x per week = total 6000 L per week
Using QH for comparison, the general waste estimate for JS is 8580L/ week
= 2x 3000L skips + 3x 1100L bins, collected 1x per week
Or 8x 1100L bins collected 1x per week
- **Recyclable waste** = recycled collected once per month
10 x 240 L bins collected 1x per week = total 2400 L/ week
Using QH for comparison, the recyclable waste estimate for JS is = 3432L
= 15 x 240L bins collected 1x per week

Findings from Woolongong Public School (W)

- Number of students = 414 (JS is about 2.5 larger)
- **General waste** = 1x 3000L skip collected 1x per week
Using W for comparison, the general waste estimate for JS is 7500L/ week
= 2x 3000L skips + 2x 1100L bins, collected 1x per week
Or 7x 1100L bins collected 1x per week
- **Paper/ cardboard waste** = 1x 3000L skip collected at call
Using W for comparison, the cardboard waste estimate for JS is
1x 3000L bin collected at call, or 3x 1100L bins collected at call

Findings from Parramatta Public School

- Number of students = 600 (JS is about 1.6 larger)
- Small bins used throughout to collect waste, eg. in office areas
- Larger bins (240 L) used near the canteen and the playground
- Caretaker collects this waste on a regular basis (eg. daily) and transports it on a trolley to the main waste bins
- **General Waste** = 1x 3000L skip collected 2x per week = total 6000 L
Using P for comparison, the general waste estimate for JS is 9600L/ week
= 3x 3000L skips collected 1x per week
Or 9x 1100L bins collected 1x per week
- **Recyclable Waste** = 10x 240 L bins collected 1x per week = total 2400 L
Using P for comparison, the general waste estimate for JS is 3840L/ week
= 16x 240L bins collected 1x per week

Waste Management Strategy

The above comparison schools indicate that the waste pad will need to house the following:

Quakers Hill Public School

General waste

**2x 3000L skips + 3x 1100L bins
collected 1x per week**

Or 8x 1100L bins collected 1x per week

Recyclable waste

15 x 240L bins collected 1x per week

Wollongong Public School	
General waste	2x 3000L skips + 2x 1100L bins collected 1x per week Or 7x 1100L bins collected 1x per week
Recyclable waste	1x 3000L skip collected at call
Parramatta Public School	
General waste	3x 3000L skips + 9x 1100L bins collected 1x per week Or 16x 1100L bins collected 1x per week
Recyclable waste	13x 240L bins per week

Summary

Parramatta PS appears much higher than the first two schools and could be an anomaly so it has been discarded. As such, based on the first two references, space is to be provided for the following:

General waste estimate

2x 3000L skips + 3x 1100L bins, collected 1x per week

Recyclable waste estimate

15x 240 L bins collected 1x per week

Other waste (eg. yearly clean up) collected at call

NOTES

- Traffic consultant to provide swept path diagrams to show suitable waste truck access to collect the 3000L skips and the bins
- Truck must be able to enter and exit the site in a forward direction
- Waste compound to be suitably screened from view.
- The bin and truck parking area to be level
- General waste and recyclable waste collected by separate trucks
- Skips are too heavy to move by hand and need to be located to suit the truck, parking space with easy truck access to the skip has been provided.
- The path of travel from the compound to the truck needs to be level.
- If a ramp is required then gradient must be maximum 1:14 for 240L bins
- If a ramp is required then use will need to be made of a bin tow able to negotiate ramps. Skips and bins cannot be placed on a ramp.
- Access to be designed to suit the collection trucks – to be verified by the traffic consultant.
- School to be encouraged to adopt recycling practices

- Separate colour coded bins to be provided at strategic locations for waste.
- Caretaker to collect waste on a regular basis and transport it on a trolley to the main waste compound.
- This report is part of the development application process for a state significant development application. The final sizing of waste stores and frequency of waste collection will be made once final agreements are in place.

PART 3 - MISCELLANEOUS

.01 Waste Segregation and Minimisation – EPA policies

The waste strategy for the development will be continually evaluated by the School Management, to improve the service provided and to achieve the NSW Government's waste reduction targets, through improved recycling methods and aiming to minimize waste.

The School Management will prepare an Environmental Management System addressing the waste collection and recycling procedures. This will set out expectations and achievable objectives. The School will need to implement the following:

Avoidance

School to manage this to discourage the generation of waste, eg. kids lunches to be in reusable containers, use of suppliers with in-house sustainability policies, etc

Resource Recovery

School to manage this by encouraging recycling of every potential item, eg. paper, electronic equipment, furniture, etc.

Disposal

School to manage this by arrangement with waste company, eg. separation of recyclables and organic waste. Use of waste collection provider with in-house sustainability policies.

.02 Waste Stores Requirements

The bins will be placed in an outdoor compound. The bin parking area will be designed in line with Council requirements. The following requirements are also subject to the Council Conditions of Consent.

1. Floor finish

The main waste compound to be a sealed concrete slab, graded and drained to meet Sydney Water Guidelines.

2. Screen

The bin parking area to be screened from view and integrated into the building design

3. Drainage

Store to be graded and drained to sewer and grease trap. Refer to Sydney Water for requirements.

4. Ventilation

The waste stores must be ventilated by either natural ventilation (5 litres/ sqm) or be mechanically ventilated. The ventilation system will comply with AS 1668 Parts 1 & 2 and Council's ventilation guidelines.

5. Safety

All equipment must have safe operation procedures in place. Appropriate safety signage must be provided.

6. Washing

Provide a trapped gully and hot and cold water mixer tap. Refer to Sydney Water for requirements.

7. Grease Trap

Refer to Sydney Water Guidelines for requirements

8. Path of travel

(From bin holding areas and/ or waste stores to truck

- No steps or kerbs
- Maximum gradient = 1:14

Note

Clinical Waste

Chemical waste from any Science Laboratory or Materials Workshop and Visual Arts areas is to be stored in a dedicated store room within the preparation area or storage area of the workshops. The waste is to be collected from this point and disposed of by a specialist waste contractor.

Sharps are also to be collected and disposed of by a specialist waste contractor