

murlan

Waste Management Plan

Private Hospital
for the Aged and Disabled

1-8 Nield Avenue
Greenwich NSW 2065

1.0 INTRODUCTION AND OBJECTIVES

This Waste Management Plan (WMP) has been prepared for the proponent Waterbrook at Greenwich Pty Ltd to accompany an Environmental Assessment (EA) Report for a Part 3A application to the Department of Planning (Project Application MP07_0167) relating to a proposed private hospital for the aged and disabled on a site on Nield Avenue Greenwich.

This WMP has been prepared to address the method of waste management, waste minimisation and recycling during the following phases of the proposed:-

1. Construction activities including:

- 1.1 Demolition
- 1.2 Excavation
- 1.3 Construction

2. Ongoing operation of the completed hospital for the aged and disabled

1.1 REFERENCES

On 23 April 2008 the Department of Planning issued Director General Requirements (DGR's) for the Part 3A Application in accordance with Section 75(f) of the EP and A Act. In a supporting document to the DGR's was a letter from the Department of Environment and Climatic Change dated 31 January 2008.

These two documents reference amongst other things the following requirement to be included in an EA relating to waste management:-

a/ Quantity of spoil material likely to be generated during construction and options for handling, stockpiling, reuse/recycling and disposal of soil

b/ Classification of types of waste material generated and the different disposal strategies for each material

c/ Waste water treatment measures including catchment methods, reuse/recycling of waste water and treatment of prior to discharge from the site

d/ Consideration of construction materials, reduction of unnecessary packaging, pallets, crates, drums; and options for recycling

e/ Separation of waste types by their source and sending to recycling outlets/facilities during the construction and operational phases

f/ Assessment of waste activities to be conducted at the premises during the operational phase, including nature and volumes of waste generated, stored and processed on site and management methods to determine whether an environmental license will be required

Other references include:-

- Local Council regulations (Lane Cove Council)
- Urban Erosion and Sediment Control 1992 (CALM)
- Relevant Australian Standards
- Environment Protection Legislation
- Clean Waters Act 1970
- Clean Air Act 1961
- Waste Minimisation Act 1995 (NSW)
- Protection of the Environment Operations Act 1997 – Schedule 1

2.0 CONSTRUCTION WORKS – WASTE MANAGEMENT

Waste management during the construction period has been covered in the Construction Management Plan (CMP) as prepared by Murlan for this EA. Generally all matters covered in 1.1 above have been addressed in relation to the construction period under items:-

5.0 Site Containment

6.0 Ground Conditions

7.0 Waste Management Methodology during Construction

8.0 Hazardous Material Removal

Also attached is a Lane Cove Council Waste Management Plan for the proposal. This covers estimated quantities of construction material types.

3.0 OPERATIONAL ACTIVITIES – WASTE MANAGEMENT (POST COMPLETION OF CONSTRUCTION ACTIVITIES)

The proposed hospital will primarily provide low care, high care and dementia care to aged patients. There will also be a number of wards servicing permanently disabled patients. The level of health care services does not include operation theatres or other such intensive medical procedures. The specific areas of operation of this hospital requiring consideration in this WMP are:-

Patient Health Care Services

All clinical waste (such as sharp disposals, medicine waste) will be disposed of by a specialist waste contractor for clinical waste and

packaged and disposed of in accordance with NSW Health: Waste Management Guidelines for Health Care Facilities as issued by the Department of Health and dated August 1998 and Protection of the Environment Operations Regulations 2005 as amended in 2008.

Sharp waste will be collected in sharp disposal bins stored separately from other waste throughout the facility. These sharp disposal bins will be collected on a regular basis at a secure central collection bin.

Clinical waste, cytotoxic waste and pharmaceutical drug or medicine waste must each be packaged securely and appropriately labeled or placed in containers designed especially for its containment.

The final operator of this proposed hospital facility has still to be determined at the time this WMP was prepared. The operator of the proposed hospital facility must develop a clinical and related waste management plan in accordance with the NSW Health: Waste Management Guidelines for the health care facilities (as in force from time to time).

The operator must designate appropriate persons responsible for implementing and monitoring the clinical and related waste management plan.

The operator must keep the clinical and related waste management plan up to date, retained on the premises and available for inspection by the appropriate regulatory authority.

Commercial Kitchen and Cafe

The commercial kitchen will cater for aged and disabled patients' requirements. All bottles, plastics and paper products where achievable will be separated and recycled.

Grease arrestor will be provided and maintained as per Sydney Water requirements.

The café is primarily for use by patients, their visitors and the facility's staff.

General Waste

Bottles, plastics, wrapping material, metals, paper and other recyclable products throughout the facility will be separated from other waste and separately stored for collection by Council or private commercial waste operators – see appended completed Lane Cove Council Waste Management Forms. General waste bins will be located throughout the facility and collected to a central waste pickup point

prior to collection time and bins will be returned as soon as possible, after being emptied, to within the facility.

All general waste disposal activities shall be carried out in accordance with Lane Cove Council waste disposal regulations and other relevant authority regulations.

Energy Saving

An Energy Efficiency Assessment Report at the facility has been carried out for this EA by Vipac Engineers + Scientists, dated May 2008. The operation of this facility shall adhere to the regulatory requirements noted in Vipac's report.

4.0 STATEMENT OF COMMITMENTS

The proponent will adhere to the following during construction activities and operational activities in relation to waste management:-

- Operate the completed hospital in accordance with appropriate environmental guidelines and regulatory requirements.
- Obtain appropriate DECC licenses for waste activities during construction and operational activities.
- Prepare and implement further detailed waste management plan for operational activities in conjunction with their hospital operator and submit to the Principal Certifying Authority.
- The waste management plan for the operational hospital is to be developed in accordance with the NSW Protection of the Environment Operations Act 1997 and the NSW Health: Waste Management Guidelines for Health Care Facilities.

5.0 RELEVANT DOCUMENTS

This Waste Management Plan must be read in conjunction with the following documents included in the EA:-

- Construction Management Plan prepared by Murlan.
- Hydraulic and Drainage Report and plans prepared by LHO Group Pty Ltd.
- DECC letter dated 31 January 2008 ref – DOCO8/3543.
- Completed Lane Cove Council Waste Management form.
- Energy Efficiency Assessment report prepared by Vipac, May 2008.

APPENDIX A

COMPLETED LANE COVE COUNCIL WASTE MANAGEMENT FORM



Lane Cove Council

Submit this with your completed
Development Application Form

Waste Management Form

You are exempt from submitting a Waste Management Form only if your development fits the following criteria:

- Class 10 structures less than 50m² floor area
 - Class 10a – a non-habitable building being a private garage, carport, shed or the like.
 - Class 10b – a structure being a fence, mast, antenna, retaining or free-standing wall, or the like.
- Minor alterations/additions/extensions (less than 50m² floor area)
E.g. Office fit out

Note: Waste Management Forms are required for swimming pools

This Waste Management Form:

- **MUST** be submitted before the development assessment can be completed.
- Will assist you to identify the type and volume of waste generated
- Will be assessed on how waste recycling and reuse is maximised

Your proposal

SITE ADDRESS: LOTS 1, 2, 3, 5, 6, 7, 8, 41 & 42
NIELD AVENUE, GREENWICH.

BRIEF DESCRIPTION OF WORKS (demolition, excavation and construction) TO BE CARRIED OUT:

E.g. demolition of single storey dwelling and construction of new single storey dwelling with pool and garage
DEMOLITION OF EXISTING ONE & TWO STOREY
DWELLING AND THE CONSTRUCTION OF AN
AGED RESIDENTIAL CARE FACILITY
INCLUDING CAR PARKING BASEMENT.

Section 1: Demolition and/or excavation stage

You **MUST** complete this section if you are proposing any demolition or excavation work.


SEPARATE ON SITE AND SAVE

By sorting on site and staging demolition works, it is possible to reuse many materials either on or offsite. Use colour coded or clearly labeled bins for the separation of different materials onsite.

By reusing and recycling different materials, you will effectively reduce waste going to landfill. In addition, these options significantly reduce tipping charges and offer substantial cost savings.

HAVING TROUBLE ESTIMATING THE VOLUME OF WASTE? DON'T KNOW WHAT TO DO WITH IT? Refer to www.lanecove.nsw.gov.au

Material on site		Where will the waste go? (Refer to the end of this form for suggestions)		
Type of material	Volume (m ³)	REUSE ON SITE Specify how materials will be reused or recycled onsite	RECYCLING OFF SITE Specify the contractor and recycling depot location	DISPOSAL Specify the contractor and landfill site
EXAMPLE: bricks	3m ³	1m ³ clean and reuse for footings and broken bricks behind retaining walls	1m ³ sent by <u>Shorewell</u> demolishers to <u>Arrable</u> recycling depot, Sydney.	1m ³ sent by <u>Shorewell</u> demolishers to <u>Cambers</u> landfill site, Sydney.
Excavation material/soil	150	REUSE + FILL	NORTH RYDE (N.R.)	LANDFILL SITE TBA WHEN CONTRACTOR APPT.
Bricks	100	CLEAN REUSE	CRUSHED + REUSE	-
Concrete	10		CRUSHED + REUSE	-
Tiles	25		CRUSHED + REUSE	-
Timber	24	HOARDING	CHIPPED	-
Steel	5	REUSE	RECYCLE	NOM. RECYCLE
Plasterboard	10	-	-	LANDFILL (N.R.)
Metals	15	-	RECYCLE	NOM. RECYCLE
Green waste	100	CHIP REUSE LANDSCAPE	CHIP - LANDSCAPE	-
Contaminants E.g asbestos, lead, PCBs	N/A	-	-	IF SO, DISPOSED TO MUST. STAND
Other waste e.g. ceramic tiles, paints, plastics, PVC tubing, cardboard.	25			LANDFILL SITE TBA WHEN CONTRACTOR APPOINTED

Form continues over page 

Section 2: Construction stage

You **MUST** complete this section if you are proposing any construction work.

To save resources and minimise waste during construction, consideration should be given to:

- Purchasing – order the correct quantities of materials, prefabricate where possible
- Reusing formwork
- Carefully separating off cuts to facilitate reuse

Material on site		Where will the waste go? (Refer to end of this form for suggestions)		
Type of material	Volume (m ³)	REUSE ONSITE Specify how materials will be reused or recycled onsite	RECYCLING OFFSITE Specify the contractor and recycling depot location	DISPOSAL Specify the contractor and landfill site
EXAMPLE: bricks	20m ³	3 m ³ clean and reuse for footings and broken bricks behind retaining walls	15m ³ sent by <u>Shorewell</u> demolishers to <u>Arrable</u> recycling depot, Sydney.	2m ³ sent by <u>Shorewell</u> demolishers to <u>Cambers</u> landfill site, Sydney.
Excavation material/soil	15,500	REUSE TOPSOIL FOR LANDSCAPING & FILL IF REQ.	—	LANDFILL SITE TBA BY HIGH CONTRACTOR APPOINT. N. RYDE.
Bricks	—	REUSE / FILL / FOOTINGS	—	CRUSHED
Concrete	30	—	—	—
Tiles	—	—	—	—
Timber	30	REUSE ON SITE	CHIPPING TBA	—
Steel	2	—	RECYCLE	NON. RECYCLE
Plasterboard	40	—	—	LANDFILL
Metals	15	—	RECYCLE	NON. RECYCLE
Green waste	12	CHIP REUSE LANDSCAPE	CHIP LANDS.	—
Contaminants E.g asbestos, lead, PCBs	N/A	—	—	—
Other waste e.g. ceramic tiles, paints, plastics, PVC tubing, cardboard.	10	—	RECYCLING WHERE POSSIBLE	APPROPRIATE LAND FILL SITE POSSIBLY N. RYDE TBA WHEN CONTRACTOR APPOINT.

Form continues over page



Section 3: Waste storage area design

You **MUST** complete the following checklist when designing waste areas for the proposed development.

(E.g. for medium to high density residential dwellings, retail, commercial, industrial use, food shops, office fit out, any facility where hazardous waste is produced).

All activities produce on going waste, which must be managed by optimising opportunities for recycling and reuse in an appropriate facility.

Your plans will be assessed with regard to the following requirements and **MUST show**: (tick the boxes when completed).

<input checked="" type="checkbox"/>	Location of temporary waste storage space within the building (e.g. waste cupboards)
<input checked="" type="checkbox"/>	Location and design of permanent waste storage and recycling areas (e.g. garbage rooms). Note: waste storage area size is based on waste generation rates and required bin sizes
<input type="checkbox"/>	Location of composting area (for medium to high density residential dwellings only) (optional)
<input checked="" type="checkbox"/>	Details of how waste collection vehicles can access the waste collection area

Further information

Construction and Demolition Recycling Directory

Lists contact details of where to recycle and purchase aggregates, concrete, brick, asphalt, soil, secondhand building materials and timber. Call 1800 225 587 for a free hardcopy.
www.resource.nsw.gov.au/index-RNSW.htm

Onsite A site dedicated solely to Construction and Demolition waste minimisation.
<http://onsite.rmit.edu.au/>

Lane Cove Council's website

Fact sheets on how to estimate waste, how to reuse materials on site and more.
DCP 4: Controls for site waste management and minimisation
www.lanecove.nsw.gov.au