



TOWN PLANNING
AND URBAN DESIGN

WASTE MINIMISATION AND MANAGEMENT PLAN

Proposed Wollongong Private Hospital

**360-364 Crown Street and 9-11 Urunga
Parade, Wollongong**

for AA Crown Pty Ltd

May 2010

PROJECT NO: 210.043 WMP

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1. INTRODUCTION

This report constitutes a Waste Management and Minimisation Plan to accompany a Project Application to the Minister for Planning for the Wollongong Private Hospital (WPH) proposal located at 360-364 Crown Street and 9-11 Urunga Parade, Wollongong.

This information details the management and minimisation of waste during the demolition, construction and continuing operational phases of the proposed development. Practical and feasible management options have been identified and are detailed. Effective waste management is essential for the demolition and construction phase of the project and in the ongoing operations of the site. It is noted that the clinical practices and hospital component are likely to generate wastes which require a specific contractor to deal with hazards and bio wastes which are beyond the bounds of this WMP as these relates to specific components of the WPH which will require separate WMPs. The priorities of waste management principles for this project include:

- Reduce wastes at the source;
- Reuse materials, where possible;
- Recycle wastes, where practical;
- Removal of all waste from the site; and
- Dispose of wastes appropriately and responsibly.

Specifically, this Project Application for the Wollongong Private Hospital (WPH) seeks approval for a new medical and health facility which will consist of the following major components, including the facilities and services proposed for each:

- Private Hospital:
 - 154 medical, surgical and maternity inpatient beds, predominantly in single bed rooms with private en-suite bathrooms;
 - Operating Theatre Suite (OTS) with 9 large operating rooms (as defined in the Australasian Health Facility Design Guidelines); one procedure room; 31 holding / first stage recovery bays; 9 second stage recovery bays; support, staff and administration facilities;
 - Central Sterile Stock Department (CSSD);
 - 10 bed Intensive Care Unit (ICU) adjacent to the OTS to provide post operative recovery for advanced surgical procedures, and to provide intensive health care to seriously ill medical patients;



- 4 Birthing Rooms with support spaces;
- Admission, reception, waiting and hospital administration, Medical Records and Staff facilities;
- Pharmacy; and
- Kitchen, linen handling, facilities management, biomedical engineering, central stores, bulk oxygen supply, waste management and good handling / loading.
- General Practice Centre:
 - General practice consulting rooms;
 - Diagnostic Radiology Centre with general X-ray, Magnetic Resonance Imaging (MRI), Ultrasound, Single Photon Emission Computed Tomography (SPECT) and support spaces;
 - Pathology collections and analysis laboratory;
 - Physiotherapy treatment; and
 - Dietician.
- Diagnostic, clinical and allied health tenancies:
 - Angiography Unit with 3 Catheter Laboratories (2 Cardiac and 1 Vascular), 14 holding / first stage recovery bays , 8 second stage recovery bays and support spaces;
 - 12 bed Coronary Care Unit (CCU);
 - Nuclear Medicine Unit with 2 Computed Tomography (CT) gamma camera scanning rooms, stress testing room, hot lab, injecting room;
 - Oncology Unit with 18 chemotherapy spaces;
 - Renal Dialysis; and
 - Hyperbaric Medicine Unit.
- Specialist Medical Consulting Suites:
 - Gastroenterology;
 - Urology;
 - Podiatry;
 - Neurology / Spinal Unit;



- Paediatrics;
 - Dermatology;
 - Obstetrics;
 - Gynaecology;
 - Women's Health;
 - Breast Unit;
 - Hand Surgery Unit; and
 - Cosmetic Surgery Unit.
- University of Wollongong Teaching Centre
- Ancillary retail tenancies:
 - Coffee Shop;
 - Retail Pharmacy; and
 - Florist.
- Off street parking for 324 car parking spaces including 12 accessible spaces.



1.1 DETAILS OF PROPOSAL

Site Address: 360-364 Crown Street and 9-11 Urunga Parade, Wollongong.

Buildings and other structure on site: The site currently contains a number of buildings including dwelling houses and vegetation.

Brief Description of Proposal: Specifically, the Project Application for the Wollongong Private Hospital (WPH) seeks approval for a new medical and health facility which will consist of the following major components, including the facilities and services proposed for each:

- Private Hospital:
 - 154 medical, surgical and maternity inpatient beds, predominantly in single bed rooms with private en-suite bathrooms;
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 - Gynaecology;
 - Women's Health;
 - Breast Unit;
 - Hand Surgery Unit; and
 - Cosmetic Surgery Unit.
- University of Wollongong Teaching Centre



- Ancillary retail tenancies:
 - Coffee Shop;
 - Retail Pharmacy; and
 - Florist.
- Off street parking for 324 car parking spaces including 12 accessible spaces.

The details provided on this report are the intentions for managing waste relating to this project.



2. WASTE SOURCES ASSOCIATED WITH DEMOLITION AND CONSTRUCTION PHASES

2.1 Potential Waste Sources

There are several sources of potential waste during the demolition and construction phases, including:

- Solid waste (demolition and clearance material);
- Solid waste ('domestic' debris);
- Solid waste (putrescibles); and
- Hazardous waste (oils and sludges).

A separate WMP will need to be prepared prior to the occupation of the clinical and hospital components of the WPH to deal with biomedical, toxic, infectious and hazardous wastes.

2.2 Potential Impacts

2.2.1 Solid Waste – Demolition and Clearance Material

During demolition and construction works, concrete, steel, cabling, timber and scrap metal will be encountered. The approximate quantities of waste resulting from demolition and construction phases are provided at **Appendix A**. In accordance with the principles of waste management, opportunities for re-use and recycling will be utilised.

Inert material (including steel waste if encountered during the excavation for footings) will be kept in a designated 'clean' stockpile area and covered as required with plastic and/or tarpaulins, to minimise potential dust impacts, while awaiting transport off-site.

Where possible, material will be transported to a building waste recycling facility to be specified at a later date. Alternatively, it will be disposed of at a licensed landfill site.

2.2.2 Solid Waste – Domestic Debris

'Domestic' debris comprises everyday waste such as paper, aluminium cans and other materials generated by construction and maintenance workers. It is proposed to service the site by private contractors. The size of bins within the garbage rooms will accommodate the requirements of the private contractors.

A cigarette butt collection point will be provided on-site for construction workers.



2.2.3 Solid Waste – Putrescible Waste

Putrescibles and 'green' waste comprises food scraps. These wastes will be collected and stored separately from other wastes produced during construction and disposed off-site by a licensed contractor to either a 'green waste' facility or landfill.

2.2.4 Hazardous Waste – Contaminants, Oils and Sludges

The subject site and its past history of land uses have not given rise to contaminants.

Any site works will be monitored and further environmental investigation will be undertaken if required, in accordance with the recommendations of the Environmental Assessment report.

Any waste oils accumulated during maintenance of heavy machinery will be disposed off-site by the contractor as part of their own licence agreements. Waste oil contractors and maintenance and refuelling contractors will be required to have spill response procedures in place. Refuelling will be carried out at designated areas to control potential spill and maintenance issues. Spill response equipment will be stored at the construction sites in the event of unforeseen spills due to hose breaks, etc. Minor waste oil spills will be contained and impacted soils disposed of according to NSW legislation.

No other hazardous wastes are anticipated on site. Should unexpected materials be discovered during the course of excavations, work will cease immediately and plans for the safe handling, storage and disposal in accordance with relevant statutory guidelines will be developed.



3. MITIGATION MEASURES

3.1 DETAILED WASTE MANAGEMENT PLAN

A detailed waste management plan (WMP) can be developed once a contractor has been engaged to undertake the built works and could form part of a construction management plan, which would include:

- Designated stockpiles, recycling areas, bins and a clear indication of the waste streams associated with each one;
- Stripped topsoils, if any, generated through earthworks would be stockpiled for later use;
- Plans of protection measures for waste storage areas;
- Waste handling, management and storage procedures;
- Disposal procedures for each waste stream;
- Training for on-site staff on the contents of the WMP; and
- Emergency plans and contingency plans.

3.2 WASTE TRACKING

3.2.1 Waste Management Guidelines

In accordance with the *Protection of the Environment Operations Act 1997*, and the EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes*, waste tracking requirements apply to the generation, storage, transport, treatment or disposal of certain types of wastes. Potential wastes which could be generated on site that will require tracking include:

- Waste oils;
- Oil and fuel filters; and
- Oily water.

3.2.2 Waste Register

A register of wastes will be kept throughout the construction project. The register will contain details pertaining to:

- The types and quantity of wastes for each load taken off site;
- The place to which the waste was taken for treatment or disposal; and



- The waste contractor used for each waste load.



4. OPERATIONAL WASTE MANAGEMENT

4.1 COMPONENTS OTHER THAN HOSPITAL AND CLINICAL PRACTICES

As part of the future operations of the proposed WPH, there will be the following components which will utilise private contractors will be utilised in the waste management process:

- Private Hospital:
 - Admission, reception, waiting and hospital administration, Medical Records and Staff facilities;
 - Pharmacy; and
 - Kitchen, linen handling, facilities management, biomedical engineering, central stores, bulk oxygen supply, waste management and good handling / loading.
- General Practice Centre:
 - General practice consulting rooms;
 - Diagnostic Radiology Centre with general X-ray, Magnetic Resonance Imaging (MRI), Ultrasound, Single Photon Emission Computed Tomography (SPECT) and support spaces;
 - Physiotherapy treatment; and
 - Dietician.
- University of Wollongong Teaching Centre
- Ancillary retail tenancies:
 - Coffee Shop;
 - Retail Pharmacy; and
 - Florist.

The proposed development includes a designated 'on-site' waste storage area. Common paper and food waste and recycling will be stored in the designated area until such time as it is to be collected.

The waste storage area for the WPH has been designed to be located in the loading dock area. Signage will be erected in a prominent location instructing drivers to switch off engines once in place to collect garbage. Private contractors will be engaged to service the development.



It is highly likely as part of the future operators policy for its employees all care will be taken including appropriate OH & S measures associated with the “bin store” or garbage room.

Cardboard and glass recycling

Approximately 95% of all cardboard that comes into the store as packaging can be compressed into bales by a cardboard compactor. Compacted cardboard bales can be collected on a regular basis by truck transport under contract to an approved contractor and transported to a recycling facility. Glass waste will be kept separate from general waste and transported to a recycling facility under similar arrangement.

General waste

Other store waste can be managed through the provision of a skip bin that can be maintained by an approved contractor on a weekly basis. Bins will be housed in a screened waste enclosure, in close proximity to the loading dock and be readily accessible by garbage collectors.

This process will involve a waste management routine to be undertaken by staff. This routine can include:

- Waste containers/wheelie bins will be covered at all times; and
- Waste containers/wheelie bins to be moved from the existing waste storage area to the designated collection area for pick-up



5. CONCLUSION

This Waste Management Plan has been prepared to assist the Department of Planning in the assessment of the proposal and in particular the operational components for the proposed development which do not involve clinical and hospital components. A separate WMP will need to be prepared prior to the occupation of the clinical and hospital components of the WPH to deal with biomedical, toxic, infectious and hazardous wastes.



APPENDIX A

Volumetric Calculations

