



Waste Management Plan Proposed Warehouse & Distribution Facility, Proposed Access Road and Bulk Earthworks

128 Andrews Road, Penrith
(Lot 20 in DP 1216618)

Prepared by Willowtree Planning Pty Ltd on
behalf of Cadence Property

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Waste Management Plan

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128 Andrews Road, Penrith (Lot 20 DP 1216618)

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Waste Management Plan

Proposed Warehouse and Distribution Facility, Proposed Access Road and Bulk Earthworks
128 Andrews Road, Penrith (Lot 20 DP 1216618)

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1. INTRODUCTION

Willowtree Planning Pty Ltd (Willowtree Planning) has been commissioned by Cadence Property to provide a Waste Management Plan (WMP) for the proposed Warehouse and Distribution Facility at 128 Andrews Road, Penrith (Lot 20 DP 1216618).

1.1 Objectives

The principal objective of this WMP is to identify all potential wastes likely to be generated on-site throughout both the construction and operational phases of the proposed development, including a description of how waste would be handled, processed and disposed of (or re-used/recycled).

The specific objectives of this WMP are as follows:

- To encourage the minimisation of waste production, and maximisation of resource recovery;
- To promote improved environmental outcomes through waste management;
- To ensure the appropriate management of potentially contaminated/hazardous waste (light tubes, batteries, electronic, etc);
- To identify procedures and chain of custody records for waste management;
- To assist in ensuring that any environmental impacts during the operational life of development are minimised; and,
- To ensure the long-term sustainability of resource use through more efficient, cost-effective and safe waste collection practices for the longevity of the proposed development.

Where applicable, the WMP aims to meet the principles of the waste management hierarchy, by promoting waste as a resource through the following, in order of preference:

- Waste avoidance through prevention or reduction of waste generation. Waste avoidance is best achieved through better design and purchasing choices;
- Waste reuse, without substantially changing the form of waste;
- Waste recycling through the treatment of waste that is no longer usable in its current form to produce new products;
- Energy recovery through thermal treatment of residual waste materials and from green waste processing; and,
- Waste disposal, in a manner that causes the least harm to the natural environment.

2. WASTE GUIDELINES AND LEGISLATION

2.1 Waste Avoidance and Resource Recovery Act 2001

A key policy standard for waste management in NSW is the *Waste Avoidance and Resource Recovery Act 2001* which has established a scheme to promote extended producer responsibility in place of industry waste reduction plans.

The objects of this Act are as follows:

- (a) to encourage efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development;
- (b) to ensure that resource management options are considered against a hierarchy of the following order:
 - i. avoidance of unnecessary resource consumption,

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- ii. *resource recovery (including re-use, reprocessing, recycling and energy recovery),*
- iii. *disposal,*
- (c) *to provide for the continual reduction in waste generation;*
- (d) *to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the re-use and recycling of waste;*
- (e) *to ensure that industry shares with the community the responsibility for reducing and dealing with waste;*
- (f) *to ensure the efficient funding of waste and resource management planning, programs and service delivery;*
- (g) *to achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis; and,*
- (h) *to assist in the achievement of the objectives of the Protection of the Environment Operations Act 1997.*

3. PROPOSED DEVELOPMENT DESCRIPTION

The proposed development seeks consent to undertake the development of the land portion identified as 128 Andrews Road, Penrith (Lot 20 DP 121), aligning with the IN1 General Industrial zone objectives, for which the Subject Site is zoned.

The proposed development has been specifically designed to respond to the industrial characteristics of the Site, with particular attention given to providing a smooth transition with regard to existing industrial developments along the northern and western aspects. Consent is sought to develop the Site for the purpose of a Warehouse and Distribution Facility. Operational use of the facility would be for warehousing and distribution purposes on a 24-hour, 7-day basis, consistent with surrounding operations in the immediate vicinity of the Subject Site.

Additionally, in accordance with the proposed DA, Bulk earthworks are proposed to be carried out, to establish the building pad on the Subject Site, as-well-as balance the cut/fill.

Furthermore, two (2) separate Development Applications have been previously submitted to Penrith City Council for determination (refer to **Table 1**).

Table 1: Previous Development Applications at 128 Andrews Road, Penrith			
DA Reference	Development Description	Lodged	Determination
DA13/1378	Torrens Title Subdivision with Driveway Construction and Drainage Works	21/11/2013	Approved
DA13/1174	Industrial Development – Construction of Warehouse / Factory Building, Storage Yard, Tower and Offices Associated with a Plastic Manufacturing Facility including Drainage Infrastructure, Car Parking, Driveway Access and Landscaping Works.	15/11/2013	Approved

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For contextual consideration of this WMP, the Subject Site is the primary focal point. For purposes of this document, the extent of works that are proposed under the subject Development Application, are solely confined to bulk earthworks, the built-form and associated hardstand areas, and facilities to support the proposed Warehouse and Distribution Facility.

4. OPERATIONAL WASTE MANAGEMENT

Ineffective waste management for commercial premises can lead to environmental pollution, offensive odours, litter, attraction of vermin and occupational safety and hygiene problems. Effective waste management reduces costs through the reuse of resources and minimisation of fees associated with removal, transportation and disposal of waste, and improves environmental outcomes globally, regionally and locally.

Effective waste management is achieved through the implementation of a WMP for the operational life (includes construction phase) of the proposed Warehouse & Distribution Facility.

4.1 Identified Waste Streams

The operational phase of the proposed Warehouse & Distribution Facility would likely generate the following waste streams given the intended use / activities to be undertaken:

- Plastic stretch wrapping and general plastic;
- Cardboard and paper;
- Printer cartridges and toners;
- General landfill waste;
- Maintenance waste (e.g. cleaning chemicals); and
- E-waste and potentially hazardous wastes (e.g. batteries, smoke detectors, fluorescent tubing).

4.2 Recycling, Reuse and Disposal

4.2.1 Office Waste

It is anticipated that the Subject Site could adopt the simple waste management processes consisting of the following:

- Under desk bins and paper recycling bins would be provided in office areas for scrap paper collection and recycling. Secure paper destruction recycling bins would also be provided; and,
- Printer cartridges and toners would be collected in allocated bins for appropriate contractor disposal.

In addition to the above-noted waste management procedures, procedures noted in **Section 4.2.2** and **Section 4.2.3** should be implemented where relevant.

4.2.2 Liquid Wastes

- Any liquid wastes generated by tenants should be disposed of by a suitably qualified contractor to an appropriately licensed disposal facility; and,
- No liquid wastes or wash down waters should be disposed of via the stormwater drainage system. Wastewater storage tanks (including stormwater collection tanks) should be carefully monitored to ensure overflow does not occur.

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4.2.3 Potentially Contaminated / Hazardous Wastes

- All potentially contaminated and hazardous wastes (i.e. fluorescent tubing, batteries, e-wastes and smoke detectors) should be disposed of or recycled at an appropriately licensed facility;
- E-waste (electronic waste such as computers) contains heavy metal contaminants (e.g. lead) and should be recycled at an appropriately licensed recycling facility;
- Smoke detectors should be returned to the supplier for disposal (this is a condition of the supplier's licence to sell smoke detectors) and not disposed of with general landfill waste as they contain small amounts of radioactive material. Contact the supplier for information on how to return used smoke detectors.

4.3 Waste Storage and Collection

4.3.1 Common Waste Storage Areas

The proposed development, specifically, the Subject Site should include a dedicated and enclosed centralised waste and recycling storage area. Construction of waste areas, and equipment are to comply with Council and BCA (Building Code of Australia) requirements and Australian Standards.

Space Requirements

Sufficient space should be provided for the segregation and storage of varying waste types including provision for the collection of batteries, fluorescent tubes, smoke detectors, e-wastes and other recyclable resources. Sufficient space must be provided for reuse items such as crates and pallets for occupational safety purposes.

Liquid Wastes Storage

All maintenance chemicals, oils and fuels including associated wastes should be stored separately in an appropriately bunded, well-ventilated area with a drain grease trap and allow sufficient space for handling and storage in accordance with Australian Standard *AS 1940/2004* and relevant development consent conditions (liquid waste from grease traps must be removed by a licensed waste contractor).

Spills Management

Containment measures for spillages should be provided in nearby staff car parking areas and main building operation areas (e.g. a spill kit containing non-combustible absorbent material).

General Requirements

The following additional general recommendations are provided for the waste storage area, including:

- The floor of the waste area should be bunded, graded and drained and finished to a smooth even surface;
- A water supply to the area should be provided to allow for appropriate cleaning;
- Adequate ventilation should be provided to prevent nuisance odour from occurring;
- The area should be conveniently located to enable easy access for on-site movement as well as collection and servicing;
- The waste area should be secure and lockable;
- The waste area should be clearly signposted to ensure correct use and waste separation; and,

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- The waste storage areas are to be kept clean and odour-free. It is the responsibility of the Facility Manager to routinely (twice weekly) check waste sorting and storage areas for cleanliness, hygiene and OH&S issues.

4.3.2 Waste Collection Methods

Contractor Waste Collection

It is understood that a contractor is to be employed to collect and appropriately dispose of the majority of wastes generated by the proposed Warehouse and Distribution Facility. Written evidence of a valid and current contract with a licensed waste collector is to be held at the premises. It is recommended that any contracts incorporate provisions for the collection, recycling and appropriate disposal of the potentially contaminated and hazardous waste types as noted in **Section 4.2.3**. Liquid wastes must only be collected by licensed waste contractors as approved by Sydney Water and the NSW Office of Environment and Heritage.

Waste Bin Types

The amount and type of bins would depend on the Waste Management System chosen for the proposed operation. The Waste Minimisation Policy (2005) provides specifications for a range of waste management equipment including crates and Mobile Garbage Bins (MGBs) which may be referred to when deciding on appropriate bin sizes for waste types generated by the proposed Warehouse and Distribution Facility.

Waste Bin Locations

To encourage employee recycling, general landfill waste and recycling bins should be positioned in easily accessible areas for effective recycling results. Waste and recyclables from each holding area within the premises must be transferred to a centralised waste and recycling storage area. Provisions must be made for the separation of cardboard, paper and recyclable plastics at each holding area in addition to the centralised waste storage area.

Waste Collection Rates

It is recommended that the collection of general landfill waste (especially where it contains decomposing waste) be on a daily basis, or that this waste be refrigerated during storage prior to collection. This will need to be monitored in the early stages and adjusted to suit the needs of the development accordingly.

Storage of cardboard and paper must be in a dry & vermin proof area and must not be stored for more than two (2) weeks in order to prevent the breeding of pests from occurring.

Waste Collection Access Requirements

Paths between holding areas, centralised waste storage areas and collection areas must be level and free of steps or kerbs.

Waste collection vehicles vary in size and type according to the waste collection service employed. Access to waste collection areas by collection vehicles may be impeded where inadequate turning circle areas are provided.

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4.4 Purchasing Guidelines

As part of the Waste Management System, a Purchasing Policy may be developed to include strategies for waste minimisation such as:

- Bulk purchasing or the purchase of items that use minimal packaging;
- Source materials that use recycled content (e.g. printing paper); and,
- Products purchased from local producers for the reduction of carbon miles due to transport.

4.5 Signage and Education for Employees

It is recommended that both general and recycling bins, including metal and timber crates, and any other waste collection bin, be colour-coded with clear labels identifying the type of waste that may be disposed of in each bin. This is an effective and easy way to encourage appropriate recycling by employees.

Centralised waste storage areas should also have clear signs available to assist staff with correct segregation procedures of waste types. Employees should receive training in accordance with the adopted Waste Management System especially in regard to the type of plastics which can and cannot be recycled, and Dangerous Goods / liquid wastes storage and disposal procedures.

Waste management procedures should also be clearly communicated to cleaners (and form part of any contractual conditions) to outline the cleaner's waste minimisation responsibilities.

4.6 Monitoring and Reporting Requirements

Audit and visual assessment of bins prior to collection should be undertaken within the first few months of operation to ensure the WMP is sufficient for the proposed development's needs, with findings recorded in a well-maintained log book. An audit should also be undertaken on a half-yearly basis to ensure employees are disposing of waste in the correct manner.

Quantities of waste types disposed and recycled should be documented for internal auditing. Where audits show that segregation and recycling is not carried out effectively, additional employee training should be undertaken, and signage and procedures re-examined accordingly.

The WMP should be progressively improved and updated on an annual basis, or as required, to reflect changes within the Waste Management System and to promote continual improvement of waste management.

4.7 Roles and Responsibilities

It is the responsibility of each tenant to routinely check waste sorting and storage areas for cleanliness, hygiene and OH&S issues. The tenant should also ensure all monitoring and audit results are well documented and carried out as specified in the WMP. It is the responsibility of the tenant and each employee to encourage awareness of the Waste Management System to ensure associated recycling and waste handling procedures are carried out safely and effectively.

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5 ADDITIONAL WASTE MINIMISATION STRATEGIES

The following waste minimisation strategies would be implemented for the proposed development, including:

- Pallets from other sites are recycled for shipment to clients that will not accept CHEP or LOSCAM type pallets; and,
- Collection of wastes are organised on a "on call basis" therefore ensuring maximum usage of bins and minimal transportation movements for reduction of associated carbon footprint.

6 CONCLUSION

This Waste Management Plan has been prepared by Willowtree Planning with all reasonable skill, care and due diligence applied accordingly; and, taking into account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This Report is for the exclusive use for the proposed development on the identified land portion at 128 Andrews Road, Penrith. No warranties or guarantees are expressed or should be inferred by any third parties. This Report may not be relied upon by other parties.

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