

Waste Management Plan

SSD 17161650 -Warehouse 2 and 3 – Horsley Drive Business Park
Stage 2



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1. Document Control

Revision	Prepared By	Position	Date	Changes from Previous	Status
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2. Overview

The purpose of this Waste Management Plan is to:

- Detail the quantity and classification of all waste streams during construction and operation
- Outline the proposed method to deal with construction waste throughout the entire construction phase of the building from demolition and excavation through to building fit out, landscaping and handover
- Detail the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*

3. Relevant Policies and Guidelines

This plan has been developed in consideration of the following policies and Guidelines:

- Protection of the Environment Operations Act 1997
- Waste Avoidance and Resource Recovery Act
- NSW Waste Avoidance and Resource Recovery Strategy 2014-2021
- Calculation method for waste generation, recycling and diversion supporting document for the NSW Waste Avoidance and Resource Recovery Strategy Progress Report 2017-18

3.1. Protection of the Environment Operations Act

The *Protection of the Environment Operations Act 1997* covers the requirements for waste generators in terms of storage and correct disposal of waste. The act establishes the waste generator as having responsibility for the correct management of waste, including final disposal.

3.2. Waste Avoidance and Resource Recovery Strategy

This WMP is a requirement for new developments in NSW and must be written with reference to the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21* (WARR Strategy). The WARR Strategy targets 6 key result areas including:

- Key Result Area 1: Avoid and reduce waste generation
- Key Result Area 2: Increase recycling
- Key Result Area 3: Divert more waste from landfill
- Key Result Area 4: Manage problem wastes better
- Key Result Area 5: Reduce litter
- Key Result Area 6: Reduce illegal dumping.

3.3. Waste Avoidance and Resource Recovery Strategy

The *Waste Avoidance and Resource Recovery Act* is the overarching act for which the WARR strategy was written. The objectives of the act are as follows:

- To encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development (ESD);
- To ensure that resource management options are considered against a hierarchy of the following order:
 - Avoidance of unnecessary resource consumption;
 - Resource recovery (including reuse, reprocessing, recycling and energy recovery);
 - Disposal;
- To provide for the continual reduction in waste generation;

- To minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the reuse and recycling of waste;
- To ensure that industry shares with the community the responsibility for reducing and dealing with waste;
- To ensure the efficient funding of waste and resource management planning, programs and service delivery;
- To achieve integrated waste and resource management planning, programs and service delivery on a State-wide basis;
- To assist in the achievement of the objectives of the Protection of the Environment Operations Act 1997

4. Development Summary

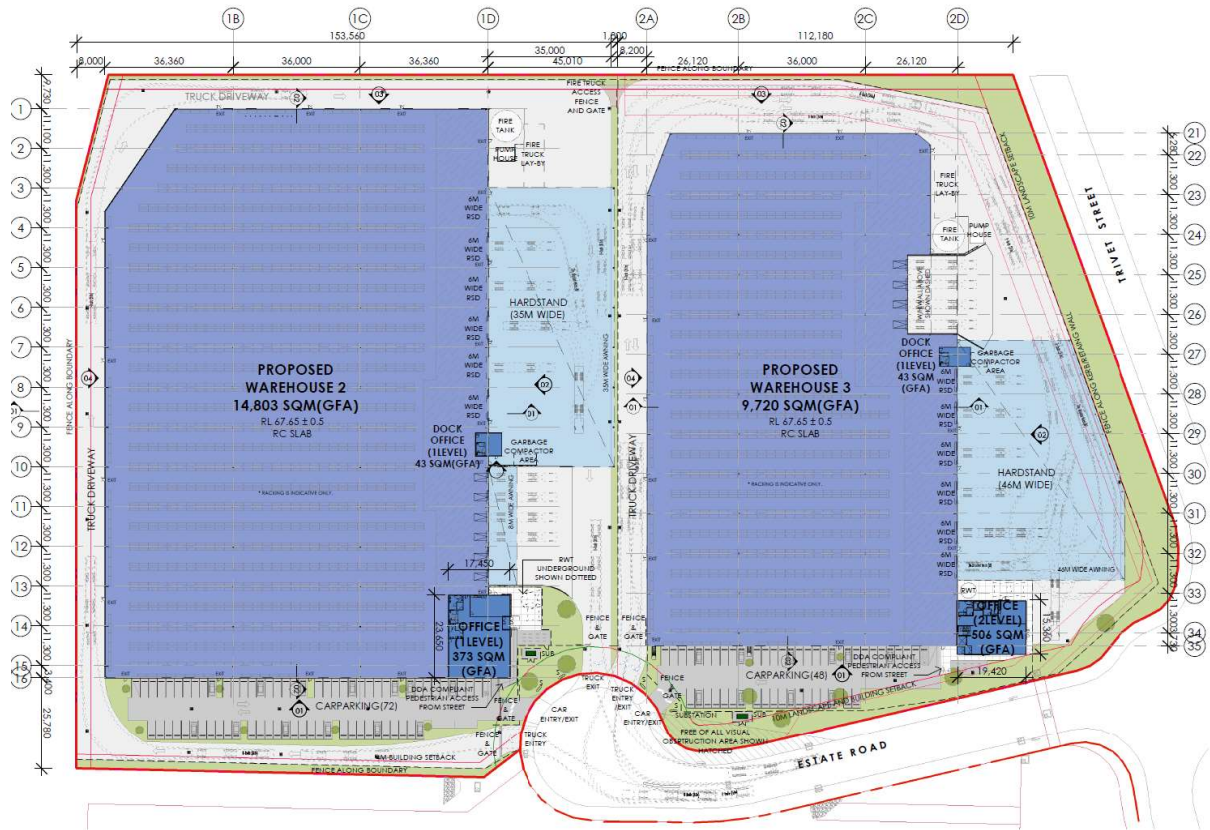
4.1. The Site

The subject site is located within the Horsley Drive Business Hub – Stage 2 (the Business Hub) which is located within Western Sydney Parklands (WSP). The Horsley Drive Business Hub - Stage 2 covers approximately 16.5 hectares (ha) of land and is located on the corner of Cowpasture Road and Trivet Street, Wetherill Park within the Fairfield LGA.

The proposed development is located on proposed Lot 2 and 3 of the Business Hub which overly Lots 18-20 on DP13961.

The Site is currently subject to the land use and development control provisions of the State Environmental Planning Policy (Western Sydney Parklands) 2009 (WSP SEPP). The area surrounding the Site includes land subject to the WSP SEPP to the northwest and south, and land zoned General Industrial (IN1) to the east.

To the north and west of the Site are predominately agricultural uses, with some scattered residential receptors. To the east of the Site is the Wetherill Park industrial precinct, which contains over 570 ha of a variety of light industrial, warehouse and storage uses. To the south of the Site is a recently constructed warehouse (Warehouse 1) also located within the Business Hub Stage 2.



4.2. Development Summary

This development application is the next phase of the development of the Horsley Drive Business Park – Stage 2 (the Site) and proposes to seek consent for the construction and operation of the following:

- Two light industrial warehouse buildings with ancillary office spaces and utilities buildings:
 - The western building accommodating a warehouse of approximately 14,803m² and a single storey ancillary office building of 416m²; and
 - The eastern building accommodating a warehouse of approximately 9,720m² and a two-storey ancillary office building of approximately 549m².
- Associated car parking spaces.
- Associated hardstand vehicle parking, loading and manoeuvring areas
- Associated landscaping.

The proposed development would operate 24 hours per day.

The table below provides a summary of the development.

Description	Warehouse 2	Warehouse 3
Warehouse GLA	14,803 m ²	9,720 m ²
Office GLA	416 m ²	549 m ²
Total GL	15,219 m ²	10,269m ²
Site area	29,538 m ²	25,151 m ²

5. Construction Waste Management

Demolition and construction stages of developments have the greatest potential for waste minimisation. The building construction is following bulk earthworks and site preparatory works that are subject to a separate Development Application and therefore all construction waste associated with this stage of the development is not considered further in this report.

Key construction activities will include:

- construction of warehouse structures and distribution / industrial - related facilities
- construction of carparking and hardstands to support the warehouse buildings

5.1. Waste Streams and Classifications

The development is likely to generate the following broad waste streams:

- excavation material;
- construction wastes;
- plant maintenance waste;
- packaging waste;
- work compound (on-site employee) waste; and
- waste water.

Possible waste types along with their waste classification are provided below in the below table.

Waste Types	NSW Classification	Proposed Reuse / Recycling / Disposal Method
Construction		
Steel reinforcing / other metal (eg wire mesh)	General solid (non-putrescible) waste	Off-site recycling
Conduits and pipes	General solid (non-putrescible) waste	Off-site recycling
Timber formwork	General solid (non-putrescible) waste	Reuse on-site or off-site recycling
Metals and bulk electrical cabling	General solid (non-putrescible) waste	Off-site recycling
Plasterboard / gyprock	General solid (non-putrescible) waste	Off-site recycling or disposal
Bricks	General solid (non-putrescible) waste	Off-site recycling
Glass	General solid (non-putrescible) waste	Off-site recycling
Concrete (solids and washouts) and asphalt	General solid (non-putrescible) waste	Reuse on-site where possible or recycle off-site as filling, levelling materials or as road base
Light bulbs	Hazardous waste	Off-site recycling
Sediment fencing, geotextile materials	General solid (non-putrescible) waste	Reuse at other sites where possible or disposal to landfill
Plant Maintenance		
Tyres	Special waste	Off-site recycling or disposal

Empty oil and other drums / tins (e.g. fuel, chemicals, paints, spill clean ups)	Hazardous waste if the containers were previously used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and from which residues have not been removed by washing or vacuuming. General solid (non-putrescible) waste if the containers have been cleaned by washing or vacuuming.	Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility. (Note: Discharge to sewer subject to Trade Waste Agreement with Sydney Water.) ¹
Air and oil filters and rags	General solid (non-putrescible) waste	General solid (non-putrescible) waste
Batteries	Hazardous waste	Off-site recycling
Packaging		
Packaging materials, including wood, plastic (including stretch wrap or LLPE), cardboard and metals	General solid (non-putrescible) waste	Off-site recycling
Wooden crates	General solid (non-putrescible) waste	Reused for similar projects, returned to suppliers, or off-site recycling
Work Compound and Associated Offices		
Recyclable beverage containers (glass and plastic bottles, aluminium cans, tin cans)	General solid (non-putrescible) waste	Co-mingled recycling at off-site licensed facility
Clean paper and cardboard	General solid (non-putrescible) waste	Paper and cardboard recycling at off-site licensed facility
General domestic waste generated by workers (soiled paper and cardboard, food stuffs, polystyrene)	General solid (non-putrescible) waste mixed with putrescible waste	Disposal at landfill
Pump-out waste and septage (sewage)	Liquid (trade) waste	Off-site disposal at licensed facility or disposal direct to sewer where arranged with Sydney Water

5.2. Estimation of Waste Volumes

The waste generation during the construction phase has been calculated based on the amount of floor the areas of warehouse, commercial offices and site area. The total waste is then split into different streams and converted to tonnes.

Below is total construction waste expected to be generated for the development.

Waste Type	Warehouse 2 (tonnes)	Warehouse 3 (tonnes)
Hard material	5,020	4,099
Timber	569	465
Plastics	183	149
Cement sheet	523	427
Gypsum material	293	239

Metals	351	287
Paper / card	84	68
Bio-organic	31	26
Soil	0	0
Other (chemicals / paint)	31	26
Total	7,085	5,786

5.3. Mitigations

5.3.1. Waste Avoidance Measures

The Builder, once appointed, will identify opportunities for waste avoidance by:

- applying practical building designs and construction techniques;
- appropriate sorting and segregation of demolition and construction wastes to ensure efficient recycling of wastes;
- selecting construction materials taking into consideration to their long lifespan and potential for reuse;
- ordering materials to size and ordering pre-cut and prefabricated materials;
- reuse of formwork (where possible);
- planned work staging;
- reducing packaging waste on-site by returning packaging to suppliers where possible, purchasing in bulk, requesting cardboard or metal drums rather than plastics, requesting metal straps rather than shrink wrap and using returnable packaging such as pallets and reels;
- careful on-site storage and source separation;
- subcontractors informed of site waste management procedures; and
- coordination and sequencing of various trades.

The builder should also advise on material selection for the reduction of embodied energy and resource depletion. This includes the use of recycled concrete and steel, the reduction of PVC use, the use of low volatile organic compounds (VOC) paints and adhesives, and the use of postconsumer reused timber or Forest Stewardship Council (FSC) certified timber. Designs enabling disassembly and reuse of materials are also desirable. Final material selection will be made with consideration for the ecologically sustainable design strategy for the site.

5.3.2. Re-use, Recycling and Disposal

Effective management of construction materials and demolition/construction waste, including options for reuse and recycling where applicable and practicable, will be conducted.

Only project wastes that cannot be cost effectively reused or recycled are to be sent to landfill or appropriate disposal facilities.

The following procedures are to be implemented:

- concrete, tiles and bricks will be reused on-site or re-used / recycled off-site;
- waste oil will be recycled or disposed of in an appropriate manner;
- all asbestos, hazardous and/or intractable wastes are to be disposed of in accordance with Workcover Authority and EPA requirements;
- portable, self-contained toilet and washroom facilities will be provided at the site and will be regularly emptied and serviced by a suitably licensed contractor;
- provision for the collection of batteries, fluorescent tubes and other recyclable resources will be provided on site to enable off-site recycling;

- drink container recycling should be provided on-site or these items sorted for recycling at an appropriately licensed facility;
- all garbage will be disposed of via a council approved system; and
- opportunities for materials exportation and reuse with other local construction operations will be investigated. This will have two benefits: minimising energy through reduction of material reprocessing, encouraging material reuse.

5.3.3. Site Specific Procedures

The Construction Site Manager will also consider implementation of the following procedures:

- • all used crates will be stored for reuse unless damaged;
- • all cardboard waste is to be recycled via on-site recycling compactors which shall be collected by an appropriate recycling contractor;
- • all glass and metals that can be economically recycled will be;
- • all re-enforcing mesh to be utilised within the construction stages of the construction;
- • colour bond roof material off cuts to be stockpiled on site for reuse or recycling;
- • waste concrete will be disposed of at a crushing/recycling plant where practicable;
- • waste bricks will be crushed and utilised on site. All half/damaged bricks and blacks will be stored on site to be removed for offsite crushing and recycling;
- • excavation material will be reused on-site where possible with all excess reused on other projects or sold; and
- • all other solid waste including bitumen paving, tile, timber, rock and soil will be taken to an appropriately licensed materials recycling facility / landfill site and processed in an approved manner.

5.3.4. Waste Segregation

For construction stages, consider minimum dedicated skips for:

- • timber;
- • plasterboard/gyprock;
- • concrete;
- • bricks;
- • steel/scrap metal;
- • general waste; and
- • other waste (i.e. for the collection of materials that may be re-used on future projects).

Separate receptacles for the safe disposal of hazardous waste types (i.e. batteries) will also be provided where applicable.

Where possible, employee drink container recycling bins will be provided nearby common areas at work compounds/work sites for plastic and glass bottles, soft drink cans, aluminium and tin cans to ensure these items do not end up at landfill. Specialised bins for cigarette butts should also be provided outside lunchrooms and nearby common areas at work compounds/work sites.

5.3.5. Space and Amenity

Waste storage areas will be accessible and allow sufficient space for storage and servicing requirements. The storage areas will also be flexible in order to cater for change of use throughout the Project.

Where space is restricted, dedicated stockpile areas are to be delineated on the site, with regular transfers to dedicated skip bins for sorting. The positions of the designated waste holding areas on site will change according to building works and the progression of the development, but must consider visual amenity, OH&S and accessibility in their selection.

All waste placed in stockpile areas/skips for disposal or recycling shall be adequately contained to ensure that the waste does not fall, blow, wash or otherwise escape from the site. Appropriate siting of waste stockpile locations will take into account slope and drainage factors to avoid contamination of stormwater drains during rain events.

Waste containers are to be kept clean and in a good state of repair.

5.3.6. Servicing and Transport

The frequency of the waste removal will, in most cases, be dictated by the volume of material being deposited into each of the dedicated skips.

Skips are to be checked on a daily basis by the Construction Site Manager to ensure that they are not overflowing. If skips are reaching capacity, removal and replacement must be organised within the next 24 hours. All skips leaving the project site will be covered with a suitable tarpaulin to ensure that the spillage of wastes from the skips whilst in transit is eliminated.

All waste collection activities for demolition and construction are to be conducted between 7am and 6pm daily.

All site generated building waste collected in the skip bins will leave the site and be deposited in the approved recycling centre, transfer station or landfill site.

5.3.7. Contaminated / Hazardous Waste

During the construction phase of the development, there must be a commitment to engage qualified and certified contractors to remove all contaminated/hazardous materials (e.g. asbestos) and dispose of all contaminated/hazardous waste at an appropriately licenced facility, where applicable.

In the event that any contaminated or hazardous materials are unexpectedly uncovered during demolition or excavation works, the Construction Site Manager is to stop work immediately and contact the relevant hazardous waste contractor prior to further works being undertaken in the area.

Contaminated material stockpiled on site will be minimised as far as possible and should be stored on HD polythene liner, in a bunded location which is protected from inclement weather. Sediment fences should also be installed around the base of stockpiles and the stockpiles should be covered. Where excavated material requires validations, samples should be taken for NATA laboratory testing as per the requirements of the contamination assessment prior to restoration works, backfilling exercises and disposal.

Any trucks carrying contaminated materials should be securely and completely covered immediately after loading the materials, to prevent windblown emissions and spillage.

Decontamination of all equipment prior to demobilisation from the site is important in order that contaminated materials are not spread off-site. This should be achieved using dry cleaning methods as far as practicable and collection of material for disposal. The following additional measures should be employed on site:

- as far as possible, all tracked surfaces to be kept free of contaminated material; and
- all equipment should be cleaned in an area contained contaminated soils so that they remain within the area, or on a lined surface and collected spoil should be treated as contaminated material.

5.3.8. Liquid Waste / Stormwater / Wastewater Management

Liquid waste is often produced from the washing down of plant and apparatus. Any liquid wastes or dangerous goods wastes generated by the development (e.g. due to damage or leakage of containment) will be disposed of by a suitably qualified contractor to an appropriately licensed disposal facility. Washdown of equipment, plant and machinery and concrete delivery trucks will take place offsite or on-site within a specified and appropriately bunded washdown bay. There

may be a local sewer that this waste water can be connected to; alternatively, this could be transferred into a localised waste water treatment facility or plant.

Waste water storage tanks (where applicable) will be carefully monitored to ensure overflow does not occur and no liquid wastes or wash down waters will be disposed of via the stormwater drainage system. Any refuelling activities will be undertaken off-site or at on-site designated areas with appropriate spill containment measures to avoid overspill to sensitive areas.

5.3.9. Spills Management

Spills on the worksite are most likely to involve fuel, hydraulic oil or engine oil spilled from plant items, and paints and solvents.

If a spillage occurs, site staff will immediately identify the spilled materials and notify the Construction Site Manager. Then contain the spill as soon as possible so it doesn't spread.

Containment measures for spillages will be provided at appropriate locations and in close proximity to staff car park areas, dangerous goods stores areas and main Project work areas (e.g. a spill kit containing non-combustible absorbent material).

Material Safety Data Sheets (MSDS) will also be located nearby spill kit areas for advice on spillage clean-up and disposal.

5.4. Monitoring and Reporting

The following measures will be undertaken to improve demolition and construction waste management and to provide more reliable waste generation figures:

1. Compare projected waste quantities with actual waste quantities produced.
2. Conduct waste audits of current projects (where feasible).
3. Note waste generated and disposal methods.
4. Look at past waste disposal receipts.
5. Record this information to track waste avoidance, reuse and recycling performance and to help in waste estimations for future waste management plans.

Records of waste volumes recycled, reused or contractor removed are to be maintained and reported to the Principal Contractor on a quarterly basis. Additionally, dockets/receipts verifying recycling/disposal in accordance with the WMP must be kept.

Daily visual inspections of waste storage areas will be undertaken by site personnel and inspection checklists/logs recorded for reporting to the Construction Site Manager or EMR on a weekly basis or as required. These inspections will be used to identify and rectify any resource and waste management issues.

Waste audits are to be carried out by the EMR to gauge the effectiveness and efficiency of waste segregation procedures and recycling/reuse initiatives. Where audits show that the above procedures are not carried out effectively, additional staff training will be undertaken and signage re-examined.

5.5. Incident Response

Incidents occurring during the construction phase of the Project may involve fuel or chemical spills, seepage or mishandling of hazardous waste, or unlicensed discharge of pollutants to the environment.

All environmental incidents are to be dealt with promptly to minimise potential impacts. An incident register must be maintained on-site at all times and include the contact details of the 24 hour EPA Pollution line.

5.6.Roles and Responsibilities

All personnel have a responsibility for their own environmental performance and compliance with all legislation. It will be the responsibility of the Contractor to implement the WMP, and an employee responsibility to ensure that they comply with the guideline at all times.

Where possible, an Environmental Management Representative (EMR) should be appointed for the Project. Suggested roles and responsibilities are provided below.

Role	Responsibility
Construction Site Manager	<ul style="list-style-type: none"> • Ensuring plant and equipment are well maintained. • Ordering only the required amount of materials. • Keeping materials segregated to maximise reuse and recycling. • Ultimately responsible for routinely check waste sorting and storage areas for cleanliness, hygiene and OH&S issues, contaminated waste materials, and also ensuring that all monitoring and audit results are well documented and carried out as specified in the WMP.
Environmental Management Representative (EMR) or equivalent role	<ul style="list-style-type: none"> • Approaching and establishing the local commercial reuse of materials where reuse on-site is not practical. • Establishing separate skips and recycling bins for effective waste segregation and recycling purposes. • Ensuring staff and contractors are aware of site requirements. • Provision of training of the requirements of the WMP and specific waste management strategies adopted for the Project. • Contaminated waste management and approval of off-site waste transport, disposal locations and checking licensing requirements. • Approval of off-site waste disposal locations and checking licensing requirements. • Assessment of suspicious potentially contaminated materials, hazardous materials and liquid wastes. • Monitoring, inspection and reporting requirements.

Daily visual inspections of waste storage areas may be delegated to other on site staff. All subcontractors will be responsible for ensuring that their work complies with the WMP through the site induction and contract engagement process.

6. Operational Waste Management Plan

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 locally, regionally and globally.

Effective waste management is achieved through the implementation of a WMP for the operational life of the development.

6.1. Waste Streams and Classifications

The operation of the Project will generate the following broad waste streams:

- general waste;
- packaging wastes (cardboard, paper, plastic, pallets);
- office wastes;
- amenity wastes; and
- maintenance wastes.

Potential waste types along with their waste classification are provided below in **Table 10**.

Waste Types	NSW Classification	Proposed Reuse / Recycling / Disposal Method
General Operations		
General garbage (including non-recyclable plastics)	General solid (putrescible) waste	Disposal at landfill
Recyclable beverage containers (glass and plastic bottles, aluminium cans, tin cans)	General solid (non-putrescible) waste	Co-mingled recycling at off-site licensed facility
Paper	General solid (non-putrescible) waste	Off-site secure shredding and recycling
Plastic packaging materials (including stretch wrap or LLPE)	General solid (non-putrescible) waste	Baled and sent for off-site recycling
Bulk cardboard	General solid (non-putrescible) waste	Baled and sent for recycling at off-site licensed facility
Wooden crates / pallets	General solid (non-putrescible) waste	Reused for similar projects, returned to suppliers, or off-site recycling
Maintenance		
Spent Smoke Detectors ¹	General solid (putrescible) waste OR Hazardous waste (some Commercial varieties)	Disposal at landfill OR offsite disposal at licensed facility
Light bulbs	Hazardous waste	Off-site recycling
E-waste (e.g. chillers and freezers)	Hazardous waste	Off-site recycling
Batteries	Hazardous waste	Off-site recycling

Maintenance waste (i.e. empty oil / paint drums etc)	Hazardous waste if the containers were previously used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and from which residues have not been removed by washing or vacuuming. General solid (non-putrescible) waste if the	Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility. (Note: Discharge to sewer subject to Trade Waste Agreement with Sydney Water.) ¹
	containers have been cleaned by washing or vacuuming.	
Air -conditioning parts and filters	General solid (non-putrescible) waste	Disposal to landfill
Maintenance waste (i.e. cleaning chemicals, solvents, area wash downs)	Hazardous waste if the containers store Dangerous Goods (Class 1, 3, 4, 5 or 8).	Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility. (Note: Discharge to sewer subject to Trade Waste Agreement with Sydney Water.) ¹
Amenities		
Grey water (from bathrooms)	Liquid waste	A new sewer connection to the existing sewer submain in Newton Road will be constructed as part of the infrastructure works.
Sewage	Liquid (trade) waste	A new sewer connection to the existing sewer submain in Newton Road will be constructed as part of the infrastructure works.
Sanitary Waste	General solid waste (putrescible)	Contractor disposal at licensed facility

6.1.1. Anticipated Waste Generation Rates

In the absence of waste generation guidelines from council the following rates have been adopted. The rates used for general waste and recycling are based on Penrith City Council DCP 2014.

Description	General Waste (L/100m ² /day)	Recycling (L/100m ² /day)	Pallets (L/100m ² /day)
Warehouse	10	10	75
Office	10	10	0

The below table provides a summary of the anticipated weekly waste generation for each facility. The recycling component is assumed to be 60% paper and cardboard and 40% other. These estimates are based on similar type generic facilities.

Waste Stream	Warehouse 2 (m3/week)	Warehouse 3 (m3/week)
General Waste	10.65	7.19
Paper and Cardboard	6.39	4.31
Other recycling	4.26	2.88
Pallets	77.72	51.03
Total	99.02	65.41

6.2. Waste Avoidance, Re-use and Recycling Measures

6.2.1. Waste Avoidance

Waste avoidance measures may include:

- provision of take back services to clients to reduce waste further along the supply chain;
- re-work/re-packaging of products prior to local distribution to reduce waste arisings;
- review of packaging design to reduce waste but maintain 'fit for purpose'; and
- investigating leased office equipment and machinery rather than purchase and disposal.

6.2.2. Re-use

Establish systems with in-house and with supply chain stakeholders to transport products in reusable packaging where possible.

Pallets are to be stored for re-used where possible. They are to be stored on site in designated area and screened from public areas where possible.

6.2.3. Recycling

Recycling opportunities include:

- development of 'buy recycled' purchasing policy;
- flatten or bale cardboard to reduce number of bin lifts required; and
- providing recycling collections within each of the offices and tearooms (e.g. plastics, cans and glass).

6.3. Waste Storage and Servicing Requirements

6.3.1. Waste Collection Area Location

A dedicated waste and recycling storage area has been provided at the centre of the site nearby the loading dock areas where the recycling bins, garbage skips, and cardboard and plastic bales will be stored prior to collection. Sufficient clearance is necessary to enable collection vehicles to access the bin storage area. Where possible collection times should not coincide with peak operational delivery schedules however all areas identified will not interfere with operational truck movements.

6.3.2. Waste Collection Area Requirements

The construction of garbage areas, rooms and equipment are to comply with BCA (Building Code of Australia) requirements and Australian Standards.

Waste/recycling storage areas will be constructed of an adequate size to accommodate all waste bins and receptacles and recycling bales associated with the development. Recycling bins must be accessible to all employees and must be clearly sign posted and colour coded to ensure segregation of waste and recycling is effective.

Sufficient space will be provided for the segregation and storage of varying waste types including provision for the collection of fluorescent tubes, smoke detectors, e-wastes and other recyclable resources.

Sufficient space will also be provided for reuse items such as crates and pallets for occupational safety purposes.

Doors/gates to the storage area will be able to be opened from both the inside and outside and wide enough to allow for easy passage of waste/recycling containers.

6.3.3. Contaminated / Hazardous Wastes

All contaminated and hazardous wastes (i.e. fluorescent tubing, batteries, e-wastes and smoke detectors) should be recycled at an appropriately licensed facility.

E-waste (electronic waste such as computers, mobile phones, printer toners and ink cartridges) and batteries contain heavy metal contaminants and should be recycled at an appropriately licensed recycling facility.

Commercial-use smoke detectors should be returned to the supplier for disposal (it 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 and/or the EPA for information on how to return used smoke detectors.

6.3.4. Liquid Waste

Liquid, semi-liquids or moist substances will not be placed in waste containers, unless securely wrapped or contained to prevent the substance from leaking.

Any liquid wastes or dangerous goods wastes generated by the development (e.g. due to damage or leakage of containment) should be disposed of by a suitably qualified contractor to an appropriately licensed disposal facility.

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.

6.3.5. Stormwater Treatment

Car parking areas must drain to a stormwater treatment device capable of removing litter, oil, grease and sediment prior to discharge to the stormwater system.

All wastewater and stormwater treatment devices are required to be regularly maintained and cleaned to ensure these devices remain effective, with all solid and liquid wastes collected from these devices disposed of in accordance with this WMP and the POEO Act.

6.3.6. Spills Management

Containment measures for spillages should be provided at appropriate locations and in close proximity to staff car park areas, dangerous goods stores areas and main warehouse operation areas (e.g. a spill kit containing non-combustible absorbent material). Material Safety Data Sheets (MSDS) should also be located nearby spill kit areas for advice on spillage clean up and disposal.

6.3.7. Signage

Education and communication must be regular and ongoing to overcome the transient nature of contractors and visiting staff members. The main signage aspects to consider are:

- general waste (garbage) and recycling bins and storage areas must be clearly and correctly

- labelled / indicated at all times;
- waste storage areas must have clear signage instructing cleaners and tenants how to correctly separate (if required);
- the location of, and directions to, waste storage areas must be well signposted;
- all hazards or potential dangers associated with the waste facilities should be clearly identified, especially those linked to compaction or other waste handling equipment; and
- emergency contact information should be displayed in case there are any issues with the waste and recycling systems/services in the building.

All signage should conform to the relevant Australian Standard and the NSW EPA's standard recycling signs.

The design and use of safety signs for waste rooms and enclosures should comply with AS 1319 Safety signs for the occupational environment. Australian Standards are available from the SAI Global Limited website (www.saiglobal.com).