

SJB Planning



Environmental Impact  
Statement

TNT Warehouse and  
Distribution Facility  
(SSD-6040)

Lot 201 Lockwood Road,  
Erskine Park

16 September 2013



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## Environmental Impact Assessment

### Environmental Impact Assessment Prepared by:

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### Applicant and Land Details

Applicant: CIP Constructions (NSW) Pty Ltd  
Suite 59  
Jones Bay Wharf  
26-32 Pirrama Road,  
Pyrmont NSW 2009

Subject Site: Lot 201 Lockwood Road, Erskine Park

Lots and DPs: Lot 201 DP 1133028

Proposal: State Significant Development Application for a Warehouse and Distribution Facility at Lot 201 Lockwood Road, Erskine Park.

### Certification

I certify that I have prepared the content of this Environmental Impact Assessment and to the best of my knowledge has been prepared, in accordance with the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*, and that it is true in all material particulars and does not mislead nor by presentation or omission of information materially mislead.



Scott Barwick  
16 September 2013

## Executive Summary

This Environmental Impact Statement (EIS) has been prepared under section 78A (8A) of the *Environmental Planning and Assessment Act 1979 (EP&A Act 1979)* in support of a State Significant Development Application at Lockwood Road, Erskine Park for the development of a new Warehouse and Distribution Facility for TNT Australia Pty Ltd. The facility will operate as the Sydney Basin freight transport facility for TNT.

The premises will operate 24 hours a day, 7 days per week. The facility will be utilised for the processing and consignment of items collected and delivered throughout Australia.

The site is located within the 'Western Sydney Employment Area' and is known as Lot 201 in DP 1133028 and located on Lockwood Road, Erskine Park ('the site').

The EIS has been prepared in accordance with the requirements of Schedule 2 Part 2 of the Environmental Planning and Assessment Regulations 2000 (EP&A Regulation 2000) and reviews the relevant environmental planning instruments and their standards as they apply to the site, and provides an assessment of the potential effects of the proposal with reference to the heads of consideration listed under section 79C of the *EP&A Act 1979* and subsequent relevant development requirements.

The site is a vacant land parcel which has been cleared and levelled pending its development for industrial purposes. The proposed use is of a scale identified in SEPP (State and Regional Development) 2011 (SEPP SRD) which triggers the State Significant Development (SSD) process. The Director-General will be the consent authority for the proposal.

The proposed development has been prepared having regard to the key development standards and requirements of State Environmental Planning Policy (Western Sydney Employment Area) 2011 (SEPP WSEA).

The proposal is for a substantial warehouse and distribution facility which includes a transport depot and administration functions. Across the 24 hours of operation, the facility is expected to employ 450 persons. The proposed use will be a major employment generating use consistent with the zoning provisions and objectives of the IN1 General Industrial zone that applies to the site under SEPP WSEA.

This EIS demonstrates that the proposed development will not result in any unacceptable adverse impacts on adjoining properties, the locality or the environment. The proposal is considered to be consistent with the aims and objectives of SEPP SRD and SEPP WSEA and the relevant key development standards and the specific objectives and design principles of the Penrith DCP 2006 – Erskine Park.

The proposal will facilitate an industrial development that will generate significant employment opportunities in an area with significant employment demand. The proposal will provide a positive social impact to the development of the area and region more broadly.

The proposed development is of an appropriate type and scale that is consistent with the aims and objectives of SEPP SRD and SEPP WSEA.

Based on the assessment undertaken approval of the proposal is sought.

# 1.0 Introduction

## 1.1 Overview

This Environmental Impact Statement (EIS) has been prepared by SJB Planning under section 78A (8A) of the *Environmental Planning and Assessment Act 1979 (EP&A Act 1979)* in support of the development of a purpose built warehouse and distribution facility for TNT Australia Pty Ltd.

The report reviews the relevant environmental planning instruments for the area. A preliminary assessment of the potential effects of the proposal with reference to the heads of consideration listed under section 79C of the *EP&A Act 1979* has also been undertaken. The EIS is set out as follows:

- Section 1 provides an introduction;
- Section 2 describes the site and local context;
- Section 3 outlines the background of the proposal and details the proposed development;
- Section 4 addresses the strategic context of the proposal
- Section 5 provides an assessment against the key assessment issues
- Section 6 presents the conclusions of the assessment.

The proposal is supported by the following information which is attached:

- Attachment 1: DGRs and Concept Plan MP 06\_0216
- Attachment 2: QS Reports
- Attachment 3: Architectural and Landscape Design Package
- Attachment 4: SEPP 55 Assessment
- Attachment 5: Transport and Traffic Assessment
- Attachment 6: Dangerous Goods Assessment and Environmental Risk Assessment
- Attachment 7: Environmental Air Quality Assessment
- Attachment 8: Noise and Vibration Report
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- Attachment 14: Waste Management Plan
- Attachment 15: Director Generals letter regarding contributions
- Attachment 16: Mitigation Measures

## 2.0 The Site and Its Context

### 2.1 The Site

The site of the proposed development is located at Lockwood Road, Erskine Park and legally identified as Lot 201 in DP 1133028. The site has an area of 9.53ha and has frontages to Lenore Drive to the north, Templar Road to the west and Lockwood Road to the south. The proposed development will utilise 7.819ha, leaving 1.711ha of the site available for future development. The lot and road configuration are the result of previous Concept Approval MP06-0216 and subsequent Project Approvals. The portion of the site to be developed is known as Site C and D in Concept Approval MP06\_0216.

The site is currently vacant and has been cleared, levelled and benched consistent with previous approvals for development and subdivision of the land. A temporary sedimentation dam is located in the north western corner of the site which will be replaced by the permanent water quality and quantity control measures to be implemented as part of the development.

Figure 1 illustrates the broader locality.



Figure 1: Location of the site (Source: www.imagery.maps.nsw.gov.au)

The site works have been undertaken consistent with Concept Plan 06\_0216 and Project Approval 06\_0208 issued on 1 March 2007, copies of which are included at Attachment 1.

Concept Plan 06\_0216 authorised the “Construction and use of a warehouse and distribution complex and associated infrastructure”.

Project Approval 06\_0208 authorised:

Stage 1 implementation of the approved concept plan for a warehouse and distribution complex and associated infrastructure, including the:

- Subdivision of the site;
- Bulk earthworks across the site;
- Construction and use of a warehouse and distribution building on site area H;
- Provision of essential services to the site; and
- Relocation of an existing creek on site.

Figure 2, is an extract from the Concept Plan and Project Approval. The site the subject of this application occupies area D and part of area C from the indicative layout plan

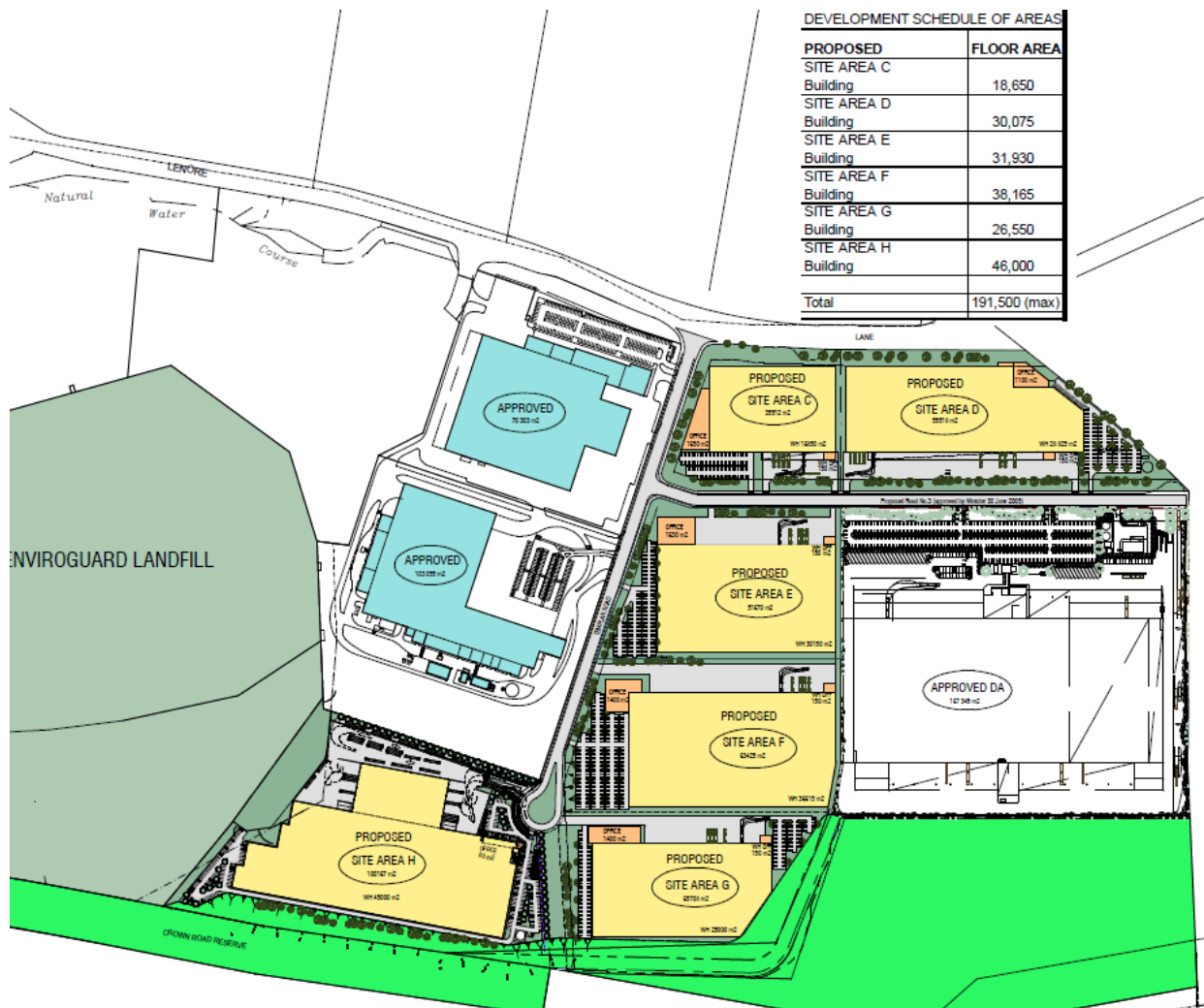


Figure 2: Indicative layout for Concept Plan 06\_0216 and Project Approval MP06\_0208

## 2.2 The Local Context

The character of the immediate locality comprises warehouse and industrial development, consistent with its location within the Western Sydney Employment Zone, and includes a range of large scale employment generating uses taking advantage of its location close to the M4 and M7 Motorways.

The area is a specifically targeted large floor plate employment area intended to accommodate the type and scale of land use proposed in this application. Development in the vicinity for employment generating uses includes Bluescope Steel and Goodman Fielder. Significant developments are nearing completion in the vicinity of the site.



Figure 3: Development at Lenore Drive looking east



Figure 4: Development at Lenore Drive looking east



Figure 5: Existing development at Lockwood Road opposite the site

The site is centrally located within Precinct 7 – Erskine Park Employment Lands within the SEPP (WSEA). The site is surrounded by land zoned IN1. A narrow band of E2 Environmental Conservation land is located to the west of the site accommodating the head of a watercourse. This land is located some 85.0m from the development works.

The development of the subject land is unlikely to impact upon the E2 lands.

### 2.3 Site History

The site is subject to an existing Concept Plan Approval 06\_0216 for the development of a warehouse and distribution complex. Concept Approval was granted on 1 March 2007. The subject land is part of the development areas identified as Site C and D in the approved Concept Plan.

The proposal does not conflict with the terms of the Concept Plan Approval. The development will utilise the base infrastructure developed and provided to the site consistent with the terms of that approval and subsequent Project Applications.

### 2.4 Concept Plan Approval MP06\_0216

Concept Plan Approval MP06\_0216 was granted on 1 March 2007 for the construction and use of a warehouse and distribution complex and associated infrastructure. This included approval for:

- Subdivision of the site;
- Bulk earthworks;

- Provision of infrastructure and essential services to the service the site;
- Stormwater management and creek realignment; and
- A landscape concept plan.

The application relies upon and utilises the developable platform established via the Concept Plan Approval and the associated roads and infrastructure.

Consistent with the Concept Plan Approval and subsequent Project Approvals, the development parcel has been established. This has entailed road works, infrastructure facilities, and site benching and levelling. Project Approval 06\_0208 included subdivision of the site to create three lots. The plan of subdivision provided with the Project Approval proposed the creation of proposed Lot 22 as depicted in the plan of subdivision included at Attachment 1. Proposed Lot 22 was subsequently registered as Lot 22 in DP 1120114. Lot 22 in DP 1120114 has subsequently become lot 201 in DP1133028 through boundary adjustments undertaken to facilitate the establishment of Lenore Drive.

The proposal does not conflict with the subdivision approved under the Project Plan and does not propose further subdivision.

The development retains a balance of 1.711ha of the site available for future development. The area is well in excess of the minimum lot size of 1.0ha identified for the locality in the Erskine Park DCP and is readily suitable to future development for a range of uses. The proposed development does not conflict with the terms of the Concept Plan or Project Approval and the need for a modification of these previous approvals does not arise.

## 3.0 Proposed Development

### 3.1 Overview

The development proposes the construction of a purpose built warehouse and distribution facility and transport terminal. The facility will be operated by TNT Australia Pty Ltd and will operate as the Sydney Basin Freight Transport facility for TNT.

The facility comprises a central warehouse building designed to maximise vehicle access for unloading and loading of parcels received and sorted on site prior to delivery.

The total building area proposed is 31,902m<sup>2</sup> comprising:

- 29,740m<sup>2</sup> Warehouse and raised dock
- 500m<sup>2</sup> Main operations office
- 200m<sup>2</sup> Operations office 2 (2 levels)
- 300m<sup>2</sup> Operations office 3 (2 levels)
- 1,000m<sup>2</sup> Main office / administration (2 levels)
- 30m<sup>2</sup> Gatehouse
- 132m<sup>2</sup> Truck wash and maintenance

Of the site area of 7.819ha, paved areas for vehicle circulation and parking is proposed comprising 35,521m<sup>2</sup>. A paved outdoor staff area of 180m<sup>2</sup> is proposed to the south of the main office building.

Car parking for staff is a combination of at grade and decked parking accommodating a total of 350 spaces, including four (4) accessible spaces. A total of 24 bicycle parking spaces are also provided.

On-site vehicle storage comprises accommodation for:

- 18 – prime movers;
- 60 – trailer parking spaces;
- 85 – 5 tonne trucks; and
- 60 – 8 tonne trucks.

The warehouse is a single level high clearance structure with raised loading dock to accommodate the specialised sorting and loading machinery.

Small two (2) level office spaces are accommodated within the main warehouse building. The main administration office is a two (2) level office building with a two (2) level decked car park to the north.

The site has a Capital Investment Value (CIV) of \$57,689,785 and is therefore State Significant Development in accordance with Schedule 2 (3) of SEPP (State and Regional Development) 2011.

The proponent, TNT is a global company, operating in 200 countries around the world. The business went global in the 1970s and 1980s and TNT expanded into new markets by buying transportation companies in Europe, North America and Brazil. In 1996, TNT was acquired by KPN, a Dutch national post and telecoms

company. Throughout the 2000's, TNT continued to expand its services into China, India, Spain, Brazil and Chile through the acquisition of local businesses.

TNT operates in over 200 countries with 77,478 employees worldwide with 4,722 employees in the Pacific Region. TNT has 63 offices worldwide, with 30,000 vehicles and 46 aircraft.

TNT transfers all types of goods and documents around the world tailored to its clients' requirements with a focus on time-definite and day-definite pick up and delivery.

TNT transfers goods and documents to more than 200 countries. TNT offers a wide range of shipping tools including access to shipping information, management of shipments and online reporting easily and efficiently.

Once collected the shipment is transported to a sorting centre where it is sorted and automatically routed by destination and moves through TNT's worldwide network. The shipment travels to its destination by road or air. Once the shipment passes through the local destination depot it is delivered to the destination.

TNT currently has facilities around Australia and in the Sydney metropolitan area in Enfield, Mascot, Chullora and Homebush.

The proposed facility at Erskine Park is a consolidation of some existing facilities, but also provides for future expansion and growth of the company by providing an expansion of the companies parcel handling capacity

### **3.2 Project Description**

The proposal seeks consent for the following built form and land use:

- Construction of an industrial building purpose built to accommodate a warehouse and distribution facility and transport terminal for TNT Australia P/L;
- Fit out and installation of sorting and storage plant and machinery;
- Business identification signage; and
- Operation of the facility 24 hours per day.

The project is not proposed to be staged with the facility proposed to be constructed in full in one (1) construction phase.

The site will accommodate a single warehouse building of 29,740m<sup>2</sup> in area, ancillary office and maintenance buildings of 2,162m<sup>2</sup>. On-site car parking for 350 vehicles is proposed and 163 trucks and 60 trailers.

The facility is projected to generate 450 full time employment positions across staggered start and finish times. The peak operational periods will be between 5.00am and 9.00am and 17.00pm and 22.00pm.

Plans detailing the proposed development scheme have been prepared by CIP and are included at Attachment 3.

The following sections provide a detailed description of the proposed works as illustrated within the architectural drawings.

### 3.3 Development Statistics

A summary of the development particulars is provided in Table 1 below:

Development Particulars	Proposal
Site area	78,189m <sup>2</sup>
Gross Floor Area	31,902m <sup>2</sup>
Parking Provision	350 spaces

Table 1: Development Statistics

The facility will be equipped with a sorter system allowing the automated processing of carton freight between trailers, rigid trucks, cages and pallets. The system will consist of two (2) Fives Cinetic cross-belt (loop) sorters fed from fourteen (14) telescopic conveyors and a number of transport conveyors. The overall installation will be free-standing on an elevated concrete dock, include a support steel structure, mezzanine and access stairs. It will feature automatic in-line weight, dimensions and barcode capture equipment. The sorter system can direct items to ninety-two (92) individual destination chutes, forty (40) of which equipped with telescopic conveyors. Additional equipment will include automatic pallet tippers, a line singulator for carton separation, and pallet load and unload systems. The processing capacity of the system will be over 25,000 parcels per hour, which provides growth over the next 15 years. Additional stand-alone dock based equipment and transport units will also be used for the processing of parcels incompatible with the sorter system.

The parcels collected and delivered predominantly consist of carton parcels, but can also include palletised items and packaged goods.

### 3.4 Parking and Access

All car parking will be accommodated within the confines of the site as depicted on the accompanying architectural plans. Access is directly from Lockwood Road, with the site configured to allow all delivery vehicles to enter and exit the site in a forward direction. No access is proposed or required to Lenore Drive.

### 3.5 Land Uses

The proposal seeks to use the site for industrial purposes comprising a warehouse and distribution centre and truck depot. The volume of through put of all packages is anticipated to be 25,000 packages per day, initially increasing over time with increases in demand.

The use will entail 330 in and out truck movements per day involving small rigid trucks through to semi-trailer movements.

### 3.6 Waste Generation

Waste generated by the operation of the facility at full capacity is anticipated to be minimal as no production or repackaging is involved. The operation involves the receipt, sorting and dispatch of parcels and packages.

### 3.7 Project need

The proposed warehouse and distribution facility is proposed to be located within the Western Sydney employment area which has been established to provide the opportunity for large scale employment generating uses. The locality is ideally located for the establishment of a Sydney basin distribution facility. The

facility includes state of the art sorting and handling equipment and process and provides the capacity for TNT to expand its parcel handling capacity in a location ideally located centrally within the Sydney basin.

The facility complements and expands upon existing centres at Enfield, Mascot, Chullora and Homebush. The facility is an integral element of TNT's plans for expansion and growth to service the increasing market demand.

## 4.0 Strategic Context

The EIS has been prepared in accordance with the requirements of Schedule 2 of the Environmental Planning and Assessment Regulations 2000 (EP&A Regulation 2000). The relevant environmental planning instruments and their standards as they apply to the site, are considered in this section as required by the DGRs issued for the proposal.

Schedule 2 clause 3 subclause 8 requires an environmental impact statement to comply with the Environmental Assessment Requirements that have been provided by the Director-General. On 26 July 2013, the Director-General's requirements were issued which contain 14 'Key Issues' that are required to be addressed (Attachment 1). The Strategic context is addressed in the following sections, while the remaining Key Assessment Issues are addressed within Section.5.0.

### 4.1 Strategic Context

Land zoning and development standards for the site are contained within SEPP (Western Sydney Employment Area) 2009.

The site is zoned IN1 General Industrial and in this zone industrial uses as proposed are permitted subject to development consent.

The relevant statutory controls applicable to the subject site and proposed development include:

- The NSW State Plan 2021;
- The Metropolitan Plan for Sydney 2036;
- State Environmental Planning Policy (State and Regional Development) 2011;
- State Environmental Planning Policy No 55 – Remediation of Land;
- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No 33 Hazardous and Offensive Development;
- State Environmental Planning Policy (Western Sydney Employment Area) 2009;
- Sydney Regional Environmental Plan No.20 – Hawkesbury – Nepean River; and
- Penrith DCP 2006 – Erskine Park.

The assessment of the proposal is outlined below and addresses matters listed above as required under the *EP&A Act 1979*.

#### 4.1.1 NSW State Plan 2021

NSW 2021 was released in September 2012 and is the NSW Government's 10-year plan to rebuild the economy, return quality services, renovate infrastructure, strengthen local environment and communities and restore accountability to government.

In seeking to rebuild the economy the State Plan targets the creation of 100,000 new jobs. The proposal is consistent with the State Plan through the provision of substantial investment into the NSW economy and the delivery of 450 direct ongoing jobs within Western Sydney.

#### 4.1.2 Metropolitan Plan for Sydney 2036

The Metropolitan Plan 2036 aims to:

- Provide employment lands to support the economy's freight and industry needs (Objective E3);
- To increase and diversify the jobs and skills base of western Sydney (Objective E4); and
- To plan for half of Sydney's new employment by 2036 to be in Western Sydney (objective E5.1).

The proposal is consistent with these objectives as it will deliver substantial direct employment opportunities and flow on employment opportunities in the Western Sydney Employment area.

#### 4.1.3 State Environmental Planning Policy (State and Regional Development) 2011

The State Environmental Planning Policy (State and Regional Development) 2011 was adopted on 1 October 2011. The proposal is for a warehouse and distribution centre with a CIV greater than \$50 million. Consistent with Schedule 1(12) of the SEPP such development is deemed to be State Significant Development and is to be assessed and determined in accordance with the provisions of the SEPP. The application is supported by QS reports (Attachment 2) confirming the CIV of the project as \$57,689,785.

As the capital investment value for the development of the site exceeds \$50 million the project is State Significant Development.

#### 4.1.4 State Environmental Planning Policy No 55 – Remediation of Land

This policy introduced State-wide planning controls for the remediation of contaminated land. It states that land must not be developed if it is unsuitable for a proposed use because it is contaminated. The Concept Plan (06\_0216) which approved development of the land to create development parcels was supported by a Phase 1 Environmental Site Audit.

The report found that there was no evidence of contamination to constrain future industrial use. Subsequent approvals were lodged to bench and service the land based upon this approval.

A Preliminary Environmental Assessment – Phase 1 was also undertaken for the current landowners in March 2008 by DLA (Attachment 4) supported by an updated letter from DLA confirming the conclusion.

The review and investigations conclude that there is no evidence of past activities that would cause significant contamination and that the site complies with relevant criteria for commercial/industrial land uses. The review identifies that no remedial actions are required and that the development can be undertaken with the site in its current state.

#### 4.1.5 State Environmental Planning Policy (Infrastructure) 2007

Referral to RMS will be required under clause 104 of the SEPP due to the size of the facility and potential traffic generation.

The proposal is for the construction of a warehouse distribution building of 29,740m<sup>2</sup> in area, on a site of 78,189m<sup>2</sup> with 350 car parking spaces.

Clause 104 of SEPP (Infrastructure) 2007 requires that an industrial development of 20,000m<sup>2</sup> or any development accommodating 200 or more vehicles with access to any road is a traffic generating development requiring referral to the RMS.

The application is supported by a traffic and transport assessment prepared by Transport and Traffic Planning Associates.

As required, the assessment has considered:

- Network capacity;
- Accessibility of the site;
- Traffic and safety; and
- Parking implications.

The assessment has concluded that:

- The traffic generation of the proposed development will not present any adverse traffic implications;
- The proposed parking provision will be appropriate for the demands of the proposed facility; and
- The proposed access and internal circulation and parking arrangement are suitable and appropriate.

The site is not in the vicinity of any road or rail corridor that requires referral under Clause 85 or 88.

#### 4.1.6 State Environmental Planning Policy No. 33 Hazardous and Offensive Development

State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP 33) provides definitions and assessment criteria for hazardous and offensive and potentially hazardous and offensive development throughout the State.

An assessment against the provisions of SEPP 33 has been undertaken by Rawrisk Engineering (Attachment 6). The assessment has considered the range of Dangerous Goods which can on occasion be handled and transported by TNT Australia.

The TNT facility includes a specific Transit Storage Area that will be designed in accordance with AS 3833-2007.

The maximum quantities to be stored prior to despatch offsite comprise the following quantities:

- |   |           |
|---|-----------|
| • Class 2.1 and 2.2 (flammable and non-flammable gas – bulk being aerosols) | 7 tonnes  |
| • Class 3 (flammable liquids PGII and PGIII)                                | 20 tonnes |
| • Class 1.4s (explosives)   | 2 tonnes  |
| • Class 8 (corrosives – PGII)   | 10 tonnes |
| • Class 6.1(toxic)  | 500kg     |
| • Class 5.1 (oxidising)   | 4 tonnes  |
| • Class 9 (miscellaneous)   | 5 tonnes  |
| • Class 4 (flammable solids- Class 4.1)                                     | 1 tonne   |

Dangerous goods permanently held and stored on site comprise:

- |  |                |
|--|----------------|
| • Class 2.1(flammable gas – forklift fuel) | 7,500 litres   |
| • Class C1 (Combustible liquid- Diesel)    | 160,000 litres |

The assessment undertaken determines that the quantum of goods to be stored onsite both permanently and temporarily do not exceed the nominated thresholds under SEPP 33.

Accordingly a preliminary Hazard Analysis has been determined to be not required in this instance.

The assessment has however recommended that the Dangerous Goods storage area be reviewed and approved by a “competent person” under the provisions of the *Work Health and Safety Act 2011* prior to any Occupation Certificate for the facility being issued.

This recommendation has been included within the proposed Mitigation Measures provided at Attachment 16.

#### 4.1.7 State Environmental Planning Policy (Western Sydney Employment Area) 2009

##### **Permissibility**

##### **Zoning and Permissibility**

The subject site falls within the IN1 General Industrial zone under SEPP (WSEA) as demonstrated in the zoning map extract at Figure 6. The site is within Precinct 7 “Erskine Park Employment Lands”.

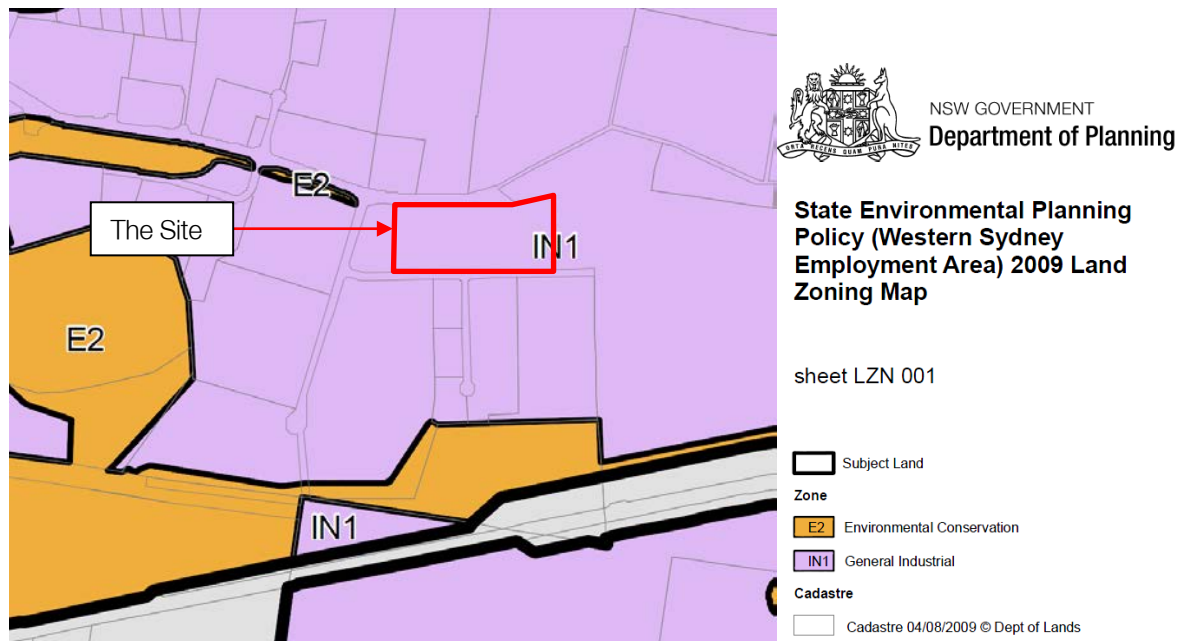


Figure 6: Zoning Map extract from SEPP (WSEA) 2009

The objectives of the IN1 General Residential zone are:

- To facilitate a wide range of employment-generating development including industrial, manufacturing, warehousing, storage and research uses and ancillary office space.
- To encourage employment opportunities along motorway corridors, including the M7 and M4.
- To minimise any adverse effect of industry on other land uses.
- To facilitate road network links to the M7 and M4 Motorways.
- To encourage a high standard of development that does not prejudice the sustainability of other enterprises or the environment.
- To provide for small-scale local services such as commercial, retail and community facilities (including child care facilities) that service or support the needs of employment-generating uses in the zone.

The proposal is for a large scale purpose built warehouse and distribution facility.

The proposal is considered to be consistent with the zone objectives as:

- The development is for employment generating purposes comprising a warehouse and distribution facility and transport depot, which are uses identified as permitted with consent in the zone;
- The development provides employment opportunities utilising the transport corridors of the M7 and M4;
- The proposed use will not, through its operations, result in adverse impacts to other land uses, does not generate offensive noise or emissions that are contrary to the zoning of the site for industrial purposes;
- The development of the subject land does not conflict with the provision of road transport linkages to the M4 and M7 motorways;
- The proposal demonstrates a high level of design and fit out and its operation will not detrimentally impact upon the operation of surrounding land uses;
- The proposal will not prejudice the sustainability of other enterprises or the environment; and
- The use does not constitute an offensive or hazardous industry.

The use is consistent with the definition of “warehouse and distribution centres”, which is a land use permitted with consent in the IN1 General Industrial zone, and does not constitute an offensive or hazardous industry which is prohibited in the zone.

#### ***Development Control Plans***

Clause 18 of SEPP (WSEA) requires that consent cannot be granted to development unless a Development Control Plan (DCP) has been prepared. Clause 18(6) identifies that the DCP to satisfy the requirement is taken to be Penrith DCP 2006 – Erskine Business Park.

The provisions of this DCP are addressed in detail at Section 4.1.10 of this EIS.

#### ***Ecologically Sustainable Development***

Clause 20 of the SEPP requires that consent must not be granted unless the consent authority is satisfied that the development contains measures to minimise:

- The consumption of potable water; and
- Greenhouse gas emissions.

The proposal includes rainwater harvesting for reuse on-site for purposes such as irrigation, toilet flushing and wash down. The collection and storage of rainwater for reuse on-site for these purposes will reduce the demand for potable water.

Greenhouse gases have been considered in the Greenhouse Gases and Energy Efficiency report (Attachment 13). The assessment has identified the greenhouse gas emissions that are likely to be generated by the facility and has detailed the implementation of an Energy Efficiency Action Plan. The implementation of the action plan is estimated to reduce greenhouse gas emissions by 66 tonnes of CO<sub>2</sub>-e per year.

Heat load reduction will be assisted through the inclusion of canopy trees in the landscaped setback to Lenore Drive which will screen and shade the northern elevation of the building.

### ***Height of Buildings***

Clause 21 of the SEPP requires that consent must not be granted unless the consent authority is satisfied that:

- Building heights will not adversely impact upon the amenity of adjacent residential areas; and
- Site topography has been taken into consideration.

The central areas of the building at ridge level is 13.7m above existing ground level. This complies with the DCP height control of 15.0m. The proposed building height is also consistent with the context and existing approved building finished heights.

The site is not adjacent to, or within, the vicinity of any residential properties. The building as proposed will not have any impact upon the amenity of residential areas.

The land upon which the development is to be undertaken has been cleared and levelled in accordance with previous consents issued for the land. These previous works have established level development areas which the proposal will utilise. The construction will therefore require minimal excavation to facilitate the undertaking of the proposed works.

The proposed building is consistent with the context of buildings in the locality.

### ***Rainwater Harvesting***

Clause 22 requires that the consent authority must not grant consent unless it is satisfied that arrangements will be made to connect roof areas of buildings to any approved rainwater harvesting scheme.

The proposal is not to be connected to any rainwater harvesting scheme because one is not available. Roof water is however proposed to be collected and used on-site for irrigation, wash down, toilet flushing and cleaning purposes.

Clause 23 stipulates requirements for development of land that is within 250m of land zoned primarily for residential purposes.

The north-western corner of the site is approximately 615m from land to the north zoned for residential purposes.

As the site is not within 250m of land zoned primarily for residential purposes, further consideration against this clause is not required.

### ***Development involving Subdivision***

Clause 24 relates to development involving subdivision. The application does not propose subdivision. Further consideration under this clause is not required.

### ***Public Utility Infrastructure***

Clause 25 requires that consent must not be granted unless public utility infrastructure essential for the development is available or able to be provided.

The site is serviced by sewer and water connections and electricity supply. The site is also capable of connections to natural gas supply. Discussions have been held with the relevant servicing authorities confirming that relevant supply is able to be accommodated or augmented.

### ***Development on or in the Vicinity of Proposed Transport Infrastructure Routes***

Clause 26 applies to land situated on or in the vicinity of a transport infrastructure route shown on the Transport and Arterial Road Infrastructure Plan map.

The subject site is not located in the vicinity of any of these proposed transport routes.

No further assessment under this clause is required.

### ***Satisfactory Arrangements for Regional Transport Infrastructure and Services***

The site is within the area designated as industrial release area for the purposes of clause 29(1) of SEPP (WSEA).

Clause 29(3) requires that certification from the Director-General be provided to the consent authority confirming satisfactory arrangements for contributions to infrastructure have been made.

Included at Attachment 15 is correspondence from the Director-General dated 30 March 2010 confirming that contributions relating to Major Project Application 06\_0208 have been fully paid to Penrith Council under the Erskine Business Park Section 94 Contributions Plan. The correspondence confirms that as a result of these payments, no further obligations arise in relation to Special Infrastructure Contributions (SIC).

### ***Design Principles***

Clause 31 requires that the consent authority in determining an application must consider whether or not:

- The development is of a high quality design;
- A variety of materials and external finishes for the external façade are incorporated;
- High quality landscaping is provided; and
- The scale and character of the development is compatible with other employment generating development in the precinct.

The proposed building is substantially setback from the property boundaries. The building is setback a minimum of 40.0m from Lenore Drive, including a 20.0m landscaped buffer. The setback from Lockwood Road is 41.0m including a 4.03m landscape strip, broken only by driveway entries. The car park design includes landscape beds to augment the tree canopy able to be achieved.

The proposed building is typical of the nature of modern industrial warehouse developments that have been constructed in the locality and has been designed to maximise the efficiency of the parcel sorting and storage undertaken. The building is also within the height control of 15.0m that applies to the site.

The building is considered to be of high quality, provided with an interesting facade and set within a landscaped context that is commensurate with the scale and nature of surrounding development.

### ***Preservation of Trees and Vegetation***

Clause 32 applies to the preservation of trees and vegetation. The site is cleared and does not contain any existing trees. Therefore, no request to remove trees or vegetation is sought or required in this instance.

#### 4.1.8 State Environmental Planning Policy No.64 – Advertising and Signage

State Environmental Planning Policy No 64—Advertising and Signage (SEPP 64) aims to ensure that outdoor advertising is compatible with the desired amenity and visual character of an area, provides effective communication in suitable locations and is of high quality design and finish.

The application includes the provision of eight(8) business identification signs comprising the TNT logo included on the elevations of the building the proposed signage comprises the following signs:

- (1) North elevation to car park 1.2m x 3.4m logo sign
- (2) North elevation of warehouse building 2m x 5.6m logo sign
- (3) North elevation of warehouse building 3.8m x 10.0m logo sign
- (4) South elevation of warehouse building 1.0m x 2.6m logo sign
- (5) South elevation of administration building 1.4m x 3.6m logo sign
- (6) East elevation of warehouse building 2.0m x 5.6m logo sign
- (7) East elevation of administration building 1.4m x 3.8m logo sign.
- (8) West elevation of warehouse building 3.8m x 10.0m logo sign

Clause 6 indicates that the SEPP applies to signage (other than signage that is exempt development) that can be displayed with or without development consent, and is visible from any public place or public reserve. The SEPP therefore applies to the proposed signage.

Part 2 of SEPP 64 applies to signage generally, while Part 3 of the SEPP applies only to advertisements which are defined under clauses 4 and 9 of the SEPP to include all signage other than the following:

- (a) business identification signs,*
- (b) building identification signs,*
- (c) signage that, or the display of which, is exempt development under an environmental planning instrument that applies to it,*
- (d) signage on vehicles.”*

The proposed signage falls within the category of “business identification sign” which is defined under SEPP 64 as follows:

*“business identification sign means a sign:*

- (a) that indicates:*
  - i. the name of the person, and*
  - ii. the business carried on by the person, at the premises or place at which the sign is displayed, and*
- (b) that may include the address of the premises or place and a logo or other symbol that identifies the business, but that does not include any advertising relating to a person who does not carry on business at the premises or place.”*

The proposed signage meets the requirements of “business identification sign” as noted below:

- The proposed signs indicate the name of the person undertaking the business – “TNT”;
- The proposed signs include the “TNT” name logo;
- The proposed signage does not include any advertising relating to a person who does not carry on business at premises.

On this basis, the proposed signage is permissible and Part 2 of the SEPP 64 is relevant.

## **Part 2 – Signage Generally**

Part 2, Clause 8 of the SEPP states:

*A consent authority must not grant development consent to an application to display signage unless the consent authority is satisfied:*

- (a) that the signage is consistent with the objectives of this Policy as set out in clause 3 (1) (a), and*
- (b) that the signage the subject of the application satisfies the assessment criteria specified in Schedule 1.*

The objectives of Clause 3 (1) (a) are to ensure that signage (including advertising):

- (i) is compatible with the desired amenity and visual character of an area, and*
- (ii) provides effective communication in suitable locations, and*
- (iii) is of high quality design and finish.*

The proposed signage is consistent with the above objectives in that:

- The location, size and appearance of the proposed signage is in scale and compatible with the visual character of the Western Sydney Employment area;
- The proposed signage does not conflict with any existing built development and natural features, nor does it interfere with road safety; and
- The design and finishes of the signage is of a high quality and provides effective communication of the location of the proposed TNT facility.

An assessment of the proposed signage against the criteria in Schedule 1 of the SEPP is provided below.

### **1. Character of the area**

Is the proposal compatible with the existing or desired future character of the area or locality in which it is proposed to be located?

Is the proposal consistent with a particular theme for outdoor advertising in the area or locality?

- The proposed signage is compatible with the character of the Western Sydney employment area comprising on building business identification signage. This type of building signage is visible in the locality.
- There is no particular theme for outdoor advertising in the area. The signage in this area tends to be larger commensurate with the scale of buildings. This is appropriate for the scale and nature of buildings in the locality.

### **2. Special areas**

Does the proposal detract from the amenity or visual quality of any environmentally sensitive areas, heritage areas, natural or other conservation areas, open space areas, waterways, rural landscapes or residential areas?

- The site is not located within a special area, conservation area or environmentally sensitive areas.

### **3. Views and vistas**

Does the proposal obscure or compromise important views?

Does the proposal dominate the skyline and reduce the quality of vistas?

Does the proposal respect the viewing rights of other advertisers?

- The proposed signage will not obscure or compromise important views.
- The signage will not dominate the skyline as it is located flush with and integrated into the elevations of the building.
- The proposed signage will not unreasonably obscure existing business identification signage.

#### **4. Streetscape, setting or landscape**

Is the scale, proportion and form of the proposal appropriate for the streetscape, setting or landscape?

Does the proposal contribute to the visual interest of the streetscape, setting or landscape?

Does the proposal reduce clutter by rationalising and simplifying existing advertising?

Does the proposal screen unsightliness?

Does the proposal protrude above buildings, structures or tree canopies in the area or locality?

Does the proposal require ongoing vegetation management?

- As highlighted above, the signage is appropriate for the Western Sydney Employment area and the site's setting within an industrial precinct. The scale and location of the signage is consistent with existing and anticipated signage on large industrial warehouse style buildings.
- Building signage will be fixed to and integrated with the elevations of the building, enhancing the appearance of the building.
- The signage does not require on-going vegetation management.

#### **5. Site and building**

Is the proposal compatible with the scale, proportion and other characteristics of the site or building, or both, on which the proposed signage is to be located?

Does the proposal respect important features of the site or building, or both?

Does the proposal show innovation and imagination in its relationship to the site or building, or both?

- As highlighted above, the proposed signage is consistent with the scale of the building on which it is located. The signage is also comparable to existing signage in the locality.
- The signs are appropriately positioned. The proposed signage does not compete with any existing structures or features.
- The signage is integrated into the elevations of the building.

#### **6. Associated devices and logos with advertisements and advertising structures**

Have any safety devices, platforms, lighting devices or logos been designed as an integral part of the signage or structure on which it is to be displayed?

- The TNT logo is integrated into the elevations.

#### **7. Illumination**

Would illumination result in unacceptable glare?

Would illumination affect safety for pedestrians, vehicles or aircraft?

Would illumination detract from the amenity of any residence or other form of accommodation?

Can the intensity of the illumination be adjusted, if necessary?

Is the illumination subject to a curfew?

- The signage is not illuminated.

## 8. Safety

Would the proposal reduce the safety for any public road?

Would the proposal reduce the safety for pedestrians or bicyclists?

Would the proposal reduce the safety for pedestrians, particularly children, by obscuring sightlines from public areas?

- The signage will not reduce the safety of the locality. The signage is consistent with the existing signage in the locality and will not be a distraction to motorists.
- The signage proposal presents no safety issues for pedestrians or bicyclists.
- The signage proposal presents no sight line issues.

### 4.1.9 Sydney Regional Environmental Plan No. 20 – Hawkesbury – Nepean River

The land falls within the area covered by Sydney Regional Environmental Policy (SREP) 20 Hawkesbury – Nepean River (No.2-1997).

The aim of SREP 20 is to “...*protect the environment of the Hawkesbury-Nepean River system by ensuring the impacts of future land uses are considered in a regional context.*”

The site is located in South Creek catchment but does not fall within any other areas of significant identified under the REP.

Part 3 of the REP lists specific land uses and identifies if any of the uses require consent, are prohibited and/or require the concurrence of another authority. None of the land uses specified are relevant to the proposed development.

The intent of the REP relevant to the proposal is the protection of the environment of the Hawkesbury-Nepean River system by ensuring that the impacts of land uses are considered in a regional context.

Of particular relevance are considerations of water quality, water quantity, flora and fauna impacts and biodiversity.

The Civil Engineering report at Attachment 10 and the discussion of stormwater management impacts at Part 6 of the assessment demonstrate that the identified targets for water quality and quantity management have been met.

The Biodiversity Assessment (Attachment 12) demonstrates that the proposed development does not pose a threat to flora and fauna habitat or the biodiversity of the locality.

The proposed development is satisfactory when considered against the relevant provisions of SREP 20 Hawkesbury – Nepean River (No.2-1997).

### 4.1.10 Penrith DCP 2006 – Part 6.10 – Erskine Park Business Park

For the purposes of Clause 18 of SEPP (WSEA) Part 6.10 – Erskine Park Business Part of Penrith DCP 2006 is the relevant DCP. The subject land is located within the “Southern Area” of the Erskine Business Park section of DCP 2006. The following sections address the provisions of the DCP relevant to the proposal.

### *DCP 2006 - Part 3 - Subdivision*

No subdivision is proposed as part of this development. No further consideration of the provisions of Part 3 of the DCP is required.

### *DCP 2006 - Part 4 – Site Development and Urban Design*

Part 4 of the DCP provides guidelines for built form controls of proposed developments. The relevant provisions are addressed below.

#### Height

Part 4.1 of the DCP requires that development within the “Southern Area” not exceed 15.0m in height. The proposed building has a maximum height of 13.7m, complying with the control.

#### Site Coverage

Part 4.2 provides that development should not exceed a site coverage of 50%. The building proposes a site coverage of 34,778m<sup>2</sup> on a site area of 78,189m<sup>2</sup>. This equates to a site coverage of approximately 44% complying with the guideline.

#### Setbacks

Part 4.3 provides guidance on required building setbacks for development in the Erskine Business Park. The required setbacks and proposed setbacks are set out in Table 2 below.

Setback Type	Required	Proposed	Consistent
Lenore Drive frontage	20.0m	41.0m	Yes
Lockwood Road	15.0m	17.43m	Yes
Side boundary (east)	5.0m	16.00 to office	Yes
Side boundary (west)	5.0m	21.5m	Yes

Table 2: Required and proposed setbacks for Erskine Business Park development

Consistent with Part 4.3.2(b), the only development proposed within the setbacks to Lockwood Road is car parking, landscaping, and access driveways. The areas not occupied by car parking or driveways are proposed to be landscaped as demonstrated in the Landscape Plan prepared by Arcadia included at Attachment 3.

The proposal is consistent with the provisions and intents of the DCP.

#### Urban Design

The building presents an attractive low-rise presentation to the street. The administration component is architecturally treated to provide an attractive but functional presentation within the landscaped context of the final boundary treatment. The office and amenities building provides shaded outdoor staff areas which provide interest to the elevation.

The elevations have been relieved through external expression of the structural elements and colour integration with the administration building. The result is a functional and utilitarian building to serve the

intended purpose. The landscaping proposed provides shade and screening as well as integration with the Lockwood Road treatment.

The vehicle entry and exit points are logical and clearly delineated.

### Signage

Signage is included as part of this application. The elevations integrate corporate branding. The signage will be corporate branding only as the facility has a single occupant, therefore tenancy signage is not required.

### Lighting

Part 4.6 requires that external lighting should be provided for safety and security, but that adverse light spill to surrounding road and rural and residential areas should be avoided.

The facility will be lit at night consistent with the 24 hour operation of the facility. The lighting will be compliant with relevant Australian Standards to minimise light spill and unnecessary glare. The separation of the employment zone from residential areas is significant and considered unlikely to result in adverse impacts.

The lighting will be provided to:

- Car access and parking areas; and
- External footpath areas.

The lighting design will be focused upon avoiding or minimising light spill through appropriate lighting design to achieve compliance with Australian Standards AS 1158.1 and AS 4282 – 1997.

The lighting proposed will conform to the lighting objectives contained in the DCP.

### Fencing

Part 4.7 provides guidelines for fencing to ensure streetscape quality is maintained. The proposed fencing is black spear style fencing to the Lockwood Road and Lenore Drive frontages. Side boundary fencing will be chain wire security fencing. The fencing to the frontage will be recessive to the landscaping and is consistent with the intent of the DCP.

### Services

Part 4.8 requires that conditions of consent will be imposed to ensure satisfactory services are provided. The site is fully serviced by utility services. The proposal is supported by a services report prepared by LandPartners (Attachment 11) confirming the availability of services and the ability for demand generated by the development to be satisfied.

In relation to drainage, the application is supported by a stormwater concept plan prepared by Costin Roe (Attachment 10) demonstrating how stormwater is to be collected and disposed of. This assessment includes water quantity and quality considerations.

### ***DCP 2006 - Part 5 – Environmental Quality***

Part 5 of the DCP establishes criteria and considerations for the management of environmental impacts. The matters for consideration identified in the DCP are set out below.

### Noise Pollution

A noise impact assessment has been undertaken for the proposed development by EMM (Attachment 8). The assessment has identified the location of the nearest potential sensitive noise receivers and undertaken noise monitoring to determine the existing ambient and background noise levels.

The operation of the site has been modelled for noise generation from the construction phase and the future operation of the premises. This data and the noise contours have been overlaid with the baseline data to identify any potential impacts to the amenity of the identified sensitive receivers during construction and operation.

The assessment has concluded that with normal site management during construction, noise impacts can be mitigated appropriately.

In relation to the operational phase of the development, it has been identified that the sensitive receivers will not be exposed to noise above the relevant assessment criteria. Mitigation measures are proposed relating to the preparation of an operational noise management plan and scheduling of truck movements to minimise concurrent operation of vehicles and to limit on-site idling during loading and unloading of vehicles.

### Waste Management

Part 5.2 of the DCP requires that new development demonstrates waste management planning and appropriate waste avoidance, reuse and recycling.

The application is supported by a Waste Management Plan prepared by CIP which is included at Attachment 14.

### Soil Erosion and Sediment Control

Part 5.3 requires that soil erosion be avoided. The application is supported by an erosion and sedimentation control plan prepared by Costin Roe. The plan demonstrates the ability to manage potential soil erosion during construction and ongoing site stabilisation.

### Air Pollution

Part 5.4 requires that development maintain or improve local air quality. The proposal is supported an Environmental Air Quality Assessment report prepared by SLR (Attachment 7).

The assessment concludes that the proposed operations are unlikely to cause significant air quality impacts on the receiving environment. The assessment is discussed further at Section 4.5

### Storage, Transportation and Processing of Chemical Substances

Part 5.5 of the DCP relates to the storage and processing of chemicals, and seeks to ensure potential harm to the environment is avoided.

The design provides for a designated Dangerous Goods store for goods in transit and the on-site storage of LPG gas for forklift operations (7,500 litres) and Diesel fuel (160,000 litres)

The application is supported by an assessment against the provisions of SEPP 33 prepared by Rawrisk Engineering (Attachment 6). This assessment has determined that the volume of chemicals stored does not constitute an offensive or hazardous industry, nor trigger the requirements for further assessment under SEPP 33.

The report details the management requirements for the materials stored and compliance with relevant guidelines.

As identified, the chemicals stored on-site will be stored in a manner consistent with the relevant Australian Standards.

#### Stormwater Pollution Control

Part 5.6 requires that water quality to the catchment is maintained and pollutants are prevented from entering the stormwater disposal system.

The proposal is supported by a stormwater assessment prepared by Costin Roe (Attachment 10). The report details the method of stormwater collection, control and management. The report demonstrates compliance with water quality and quantity targets and the implementation of Water Sensitive Urban Design (WSUD) principles.

The fuelling station will be bunded to ensure that any spills are captured and collected, avoiding their entry into the stormwater or wastewater systems. The provision of full design details at Construction Certificate (CC) stage could be conditioned if necessary.

#### Energy Conservation

The building will be required to be constructed to comply with Section J of the BCA 2013. In particular:

- The size, orientation and shading of windows is to comply with the requirements of Part J of the BCA relating to energy efficiency requiring the performance of glazing to comply with BCA Part J2;
- Window shading is to be provided to glazing as required by BCA Part J2;
- Thermal insulation to walls and roofing is to achieve the R value requirement for energy efficiency as required by Part J of the BCA;
- Air conditioning and ventilation is to comply with BCA Part J5 in relation to energy efficiency; and
- Artificial lighting and power systems to comply with BCA Part J6 in relation to energy efficiency.

The Greenhouse Gases and Energy Efficiency Report (Attachment 13) provides an overview for the preparation of an Energy Savings Action Plan to be implemented for the construction and operation of the facility. This action plan will provide operational benefits in terms of reduction in energy cost and reduction in greenhouse gas emissions from the operation of the facility.

#### Contaminated Land

The site has been the subject of a Phase 1 Preliminary Contamination Assessment (Attachment 4). As detailed in the consideration of SEPP 55, the site is not subject to contamination that would render the site unsuitable for the proposed development.

## Trading/Operating Hours

The proposal seeks consent for 24 hour operation. The operation of the facility proposes shifts and staffing are described below. The warehouse and sortation is the function that will operate 24 hours per day along with support office function and security. The warehouse operates over two (2) 12 hour shifts. The AM shift operates from 4.00am to 16.00pm with the PM shift running from 16.00pm to 4.00am the next day. The day warehouse shift is expected to comprise 60 staff with the PM shift comprising 50 staff. Start and finish times are further staggered between these hours.

The main office function will operate from 7.30am to 5.30pm and is expected to comprise up to 70 - 80 staff members.

Drivers will arrive at staggered times to commence their workday between 6.00am and 9.00am, and finish between 5.30pm and 7.00pm. The number of drivers expected to operate from the facility will be between 240 and 260 persons.

The operation 24 hours is appropriate in the context given surrounding sites operate 24 hours per day and the area is remote from residential areas. Further, the acoustic assessment supports the 24 hour operation on the basis that relevant acoustic impact criteria would not be breached by the proposed operation.

### ***DCP 2006 - Part 6 - Drainage***

Part 6 of the DCP establishes guidelines and criteria to be met for managing stormwater quality and quantity.

The site is located within the South Creek western catchment.

The assessment prepared by Costin Roe (Attachment 10) demonstrates the modelling undertaken for the development of the site and how water quality and quantity targets have been met.

### ***DCP 2006 - Part 7- Transport and Car Parking***

The application is supported by a Traffic and Transport Assessment (Attachment 5) which demonstrates that all access and egress into the site is compliant for the types of vehicles proposed to access the site.

The assessment confirms that vehicle conflict is avoided through the provision of separated entry and exits for trucks and passenger vehicles.

Council's DCP requires that for the floor areas proposed, 345 car spaces are required. This comprises 309 spaces for the warehouse area and 25 for the office space, a total 350 car spaces are provided.

Even with potential overlaps at shift change over, the proposed 350 car spaces provide ample employee parking plus scope for visitor and courier parking.

### ***DCP 2006 - Part 8 – Biodiversity***

Part 8 of the DCP relates to the protection of the biodiversity corridors in the WSEA. The site has no direct connection to these buffers. The subject site is therefore clear of constraints such as riparian corridors. Further, the subject site is fully cleared and benched awaiting development. As a result, the application does not require the removal of any vegetation.

The biodiversity assessment at Attachment 12 has reviewed the proposed development and concluded that adverse impacts to flora and fauna will not arise due to the proposed development. The proposal does not conflict with the Biodiversity provisions of the DCP.

The assessment has also included a Seven Part Test consideration to determine if the proposal would significantly impact upon the Green and Gold Bell frog and its habitats. The assessment concludes that there is unlikely to be any significant impacts as a result of the proposal. And accordingly a Species Impact Statement is not required.

#### *DCP 2006 - Part 9 – Landscaping*

The landscaping provisions of the DCP seek to enhance regionally significant ecological values, and create a landscape character for the area that is compatible with surrounding natural features.

The landscape plan provides for substantial planting to the Lenore Drive frontage with a 20.0m landscape strip provided. The landscape plan includes tree species which will achieve mature heights of up to 20.0m providing a landscape setting in conjunction with the proposed understorey planting appropriate to the scale of the buildings proposed. The landscaping will provide a landscape buffer to the main trunk route through the estate. This will positively contribute to the visual character of the area and the subject site.

The design has included landscape beds within and around the car park area.

The concept will deliver a landscape setting and amenity appropriate for the proposed development and the ongoing use of the site.

#### **4.1.11 Justification for the Proposal**

The WSEA has been zoned as an area to accommodate major employment uses. The surrounding area is the subject of current investigation to expand the lands zoned for employment uses.

The site for the warehouse and distribution facility and truck depot has important attributes that make it suitable for the proposed use which include:

- Access to the major transport routes of the M4 and M7 Motorways and the recently opened Lenore Drive and Erskine Park link road;
- The already benched and serviced land;
- The availability of services to the site;
- The ability to readily accommodate a large single level sorting facility; and
- Proximity to workforce.

The facility is able to be accommodated on the development site without adverse impacts to surrounding land uses within the employment area or the rural and residential areas beyond.

The proposed use does not involve hazardous or offensive processes and as demonstrated in the supporting studies, can be undertaken without adverse impact to the environment.

The proposal is eminently justifiable being:

- Consistent with the provision of SEPP (WSEA);
- Consistent with Concept Plan Approval MP06\_0216;
- Will deliver short-term construction employment and long-term employment within the warehouse and distributions facility; and
- Will deliver employment opportunities closer to the growth areas of Western Sydney.

#### 4.1.12 Justification for the Proposed Layout

The design and layout of the facility is specifically tailored to the delivery, sorting and dispatch of parcels and goods. The location of the building centrally on the site allows for maximum accessibility to load and unload parcels for sorting prior to dispatch.

The proposed site layout maximises the flexibility of access for the range of delivery vehicles accommodated on site and the efficiency of loading and unloading vehicles.

The design and layout of the building is critical to the efficiency of this process. Any alteration to the layout will adversely impact upon the efficiency of the management of the parcels sorted and dispatched. With these constraints, the proposed development is able to accommodate necessary parking and building setbacks.

# 5.0 Key Assessment Issues

As required by Schedule 2 clause 3 subclause 8, this environmental impact statement has been prepared in accordance with the Environmental Assessment Requirements that have been provided by the Director-General. An assessment of the proposal against the key assessment issues from the DGRs is provided below.

## 5.1 Traffic and Transport

The assessment of traffic and parking implications report (Attachment 5) has assessed:

- The traffic generation of the proposal;
- Impacts upon network capacity;
- Consideration of road upgrades;
- Assessment of proposed access option;
- Encouragement of non-car travel modes; and
- Car parking provision.

### 5.1.1 Traffic generation and network capacity

Traffic generated by the facility will comprise truck movements associated with the operation of the warehouse and distribution facility and staff arrival and departure.

The projected peak hour truck activity associated with the proposed facility is summarised in Table 3.

	AM 7.30 – 8.30		PM 5.00 – 6.00	
	In	Out	In	Out
Staff Cars	70	-	-	95
PUD(5t)	-	15	15	-
Bulk (8t)	-	10	10	-
Linehaul (S/T &B/D)	20	6	10	-

Table 3: Daily peak hour truck movements

The modelling for morning and evening peak hour traffic generation indicates that in the morning peak the facility will generate 121 vtp/h, while in the evening peak the generation will be 140 vtp/h. These rates equate to traffic generation rates of 0.38 vtp/h/100m<sup>2</sup> for the AM peak and 0.44vtp/h/100m<sup>2</sup> for the PM peak.

These rates are lower than RMS guidelines for traffic generation for similar development types, but greater than the traffic generation rates experienced for development within the Erskine Park Employment Area (EPEA) to date.

The assessment of traffic generation at Attachment 5 confirms that the operational performance of the access intersections will be satisfactory and consistent with the planned for capacity of the broader estate as traffic volumes actually being generated are significantly less than planned for.

Accordingly the proposed development does not require any upgrades for existing infrastructure in the current transport network.

### 5.1.2 Access

As identified in the architectural plans car and truck access to the site are separated. Truck access comprises a 22m wide ingress and egress driveways located on the northern side of the Lockwood Road frontage to the western end of the site. Truck movements will be restricted by boomgate controlled ingress and egress lanes. As confirmed in the assessment at Attachment 5 the access driveways will provide satisfactory sight distances and truck queuing capacity.

For car traffic there will be a separate driveway with a combined 6.0m wide ingress/egress driveway for access to the car park from the Lockwood Road frontage at the eastern end of the site.

### 5.1.3 Non Car Travel Modes

The assessment of traffic generation has taken a conservative approach and has adopted a 100% car mode split. The assessment identifies that there are limited existing public transport options available. This comprises the Busways route 779 service linking to Penrith railway station. It is expected however that as the estate develops and with the opening of the Erskine Park link road to the east opportunities for expanded public transport provision will occur. The site has also been designed to accommodate on-site bicycle parking facilities.

### 5.1.4 Car Parking Provision

Assessed against the DCP provisions of DCP 2006, the proposal generates a requirement for 345 car parking spaces. The proposal accommodates 350 car parking spaces. This quantum of car parking readily accommodates the maximum potential number of staff on-site at shift change over, and also retains capacity for visitor and courier parking demand. Of the car parking spaces, four (4) are designated as disabled driver car parking spaces.

### 5.1.5 Suitability of Traffic and Transport Considerations

The assessment has concluded that the traffic generation of the facility is consistent with the predicted demand for development in the broader Erskine Business Park. The proposed use and operation of the facility will not result in any failure of network capacity or require upgrades to the road network.

The separated entry and exit points for truck and passenger vehicle traffic to the site has been determined to be practical and safe, and consistent with relevant standards.

In considering public transport and non-car travel options, it is identified that "Busways" bus route 779 services the area on weekdays. These services are expected to increase as further development of the estate occurs and the regional road network is completed, providing improved connectivity and efficiency for bus route planning.

The facility is also provided with dedicated bicycle parking for twenty four (24) bikes, facilitating cycling as a mode of travel to the site.

## 5.2 Infrastructure Requirements

Infrastructure to be provided on site comprises:

- Fire service pump and water storage tanks; and
- Gas storage tank.

The need for utility service provisions has been assessed in the Services Report (Attachment 11).

These reports confirm that:

- Electricity supply can be accommodated for the facility to service proposed indoor substations;
- Telecommunications services will be accommodated via underground connections;
- Waste water capacity is available to the site;
- Potable water supply is available; and
- Gas is currently in Lockwood Road.

The considerations confirm that servicing is available for the proposed development.

The connections of the site to these services will be undertaken in coordination with the service authorities to manage or avoid any service disruptions.

## 5.3 Planning Agreements/Developer Contributions

The proposal does not include any proposed planning agreement to be entered into. The development site is a development lot created pursuant to Concept Plan Approval MP06\_0216 granted on 1 March 2007.

Correspondence from the Director-General dated 30 March 2010, to representatives of the landowner, GPT, confirms that payment to Penrith City Council has been made in relation to all Section 94 contributions that applied prior to the commencement of the Special Infrastructure Contribution (SIC) for the Wester Sydney Employment Area. The correspondence confirms that no further regional development contributions are sought for the site covered by MP06\_0216.

## 5.4 Noise

An assessment of the potential construction and operational noise impacts has been undertaken, having particular regard to potential impacts upon sensitive receivers. The Noise Impact Assessment (Attachment 8) has collected baseline data of the existing acoustic environment through a combination of attended and unattended noise monitoring. This has allowed the proposed operation of the facility to be modelled and assessed against the NSW Industrial Noise Policy (INP) and the NSW Road Noise Policy (RNP).

### 5.4.1 Key Noise Issues

The main potential noise issues considered with respect to the proposal in Attachment 8 have been identified as:

- Noise from earthworks, acknowledging that major earthworks for the subject site have been completed;
- Noise associated with the construction of the project;
- Noise associated with the operation, which is expected to be dominated by on-site trucking movements and loading/unloading at the docks;
- Noise associated with the increased traffic to/from the site during construction and operation; and

- Cumulative noise from all existing and proposed industrial operations part of the larger development precinct incorporating similar operations.

The acoustic assessment has focussed on these key issues and has included noise measurement, derivation of suitable criteria in accordance with the NSW Government's Industrial Noise Policy (INP) and recommendations for suitable mitigation such that sensitive receptors are not adversely impacted. The assessment will also extend to traffic noise impact on residences in accordance with the NSW Road Noise Policy (RNP).

#### 5.4.2 Existing Acoustic Environment

The existing acoustic environment was measured by means of short-term attended and long-term unattended noise monitoring to establish the existing baseline acoustic environment. Long term unattended noise monitoring was conducted to establish the level of ambient noise at residences. This was supplemented by attended noise monitoring to quantify the existing industrial and road traffic noise at potentially affected receivers. The monitoring locations were in the nearest sensitive receivers some 900m and 1,100m from the development site.

#### 5.4.3 Assessment of Acoustic Impacts

The noise and vibration assessment has included consideration of the potential noise generation of the proposed facility as well as the cumulative impact of the facility considered in the context of existing facilities within the Erskine Park Employment Area.

During the construction phase the assessment has identified that there is the potential for construction noise to exceed the recommended criteria, if no mitigation measures are imposed at the potentially closest residences to the south. As detailed in Section 5.5.4 mitigation measures are proposed to manage these potential impacts during the construction phase.

The assessment determines that during the operation of the facility sensitive receivers will not be exposed to noise above the relevant assessment criteria. Despite this conclusion mitigation measures are proposed to further reduce potential noise impacts arising from the operation of the facility.

#### 5.4.4 Acoustic Impact Mitigation Measures

Mitigation measures recommended for the construction phase:

- Scheduling construction activities such that the concurrent operation of plant is limited;
- Preparation of a construction noise management plan (to be included in the project Environmental Management Plan) prior to construction to ensure that all employees understand and take responsibility for noise control at site;
- Properly maintaining plant to ensure rated noise emission levels are not exceeded;
- Undertaking construction activities guided by AS2436-1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"; and
- Providing a contact telephone number via which the public may seek information or make a complaint. A log of complaints should be maintained and actioned by the site superintendent in a responsive manner.

Mitigation measure recommended for the operational phase:

- Scheduling truck movements and loading dock operations such that concurrent operation of vehicles is minimised. This would include limiting onsite vehicle idling while loading;

- Preparation of an operational noise management plan (to be included in the project Environmental Management Plan) prior to operation to ensure that all employees understand and take responsibility for noise control at site;
- Closing roller doors at the north facade when not in use during the evening and night-time period; and
- Preparation of an operational noise management plan (to be included in the project Construction Environmental Management Plan) prior to operation to ensure that all employees understand and take responsibility for noise control at site.

## 5.5 Soil and Water

The DGR's require that in consideration of soil and water impacts, assessment be undertaken for:

- Potential flooding and groundwater impacts;
- Potential contamination issues;
- Erosion and sedimentation control;
- Detail of stormwater management issues;
- Outline of water usage and efficiency measures; and
- Waste water management and spill contained.

These matters are addressed in detail in the Civil Engineering Report (Attachment 10).

### Flooding and Groundwater

The site is not identified as being flood prone or flood liable.

The design as detailed in the supporting reports ensures that any on-site flows up to and including to 1 in 100 year ARI are conveyed to the on-site bio-retention basin, and that flows are managed to avoid potentially unsafe flow depths and velocities.

The extent of earthworks are minor and do not involve or require significant excavation. Accordingly, the proposed development is not anticipated to have any impact upon groundwater and consequently groundwater dependent ecosystems.

### Contamination

The Preliminary Site Investigations undertaken for the site have not identified any sources of potential contamination that would impact upon the use and development of the land. Further to this, the site is not subject to potential Acid Sulfate Soils that require any further consideration.

### Erosion and Sedimentation

A detailed erosion and sediment control plan is included at Attachment 10 and the accompanying plans. These detail the temporary sediment basins, silt fences and "truck shaker" to control sedimentation impacts.

### Stormwater Management

The stormwater management measures are detailed in the Civil Engineering Report (Attachment 10). The report details the proposed management of stormwater runoff accommodating the 20 year ARI even in a piped system with the up to 100 year ARI events conveyed via overland flow paths. The stormwater design is included in the plans incorporated into Attachment 10, including OSD design. The assessment also addresses water quality management and the WSUD principles that are incorporated.

These systems have been designed to satisfy the water quality target set out in Council's DCP 2006 relating to:

- Gross pollutants;
- Total suspended solids;
- Total phosphorous;
- Total nitrogen; and
- Free oil and grease.

The modelling demonstrates that the adopted targets will be met.

Stormwater from the site will be discharged from the site via an outlet from the OSD system as detailed in the Civil Engineering report in Attachment 11. The system has been designed to be constructed in accordance with *Outlet Structure Guidelines* published by the Department of Water & Energy and the Blue Book.

### **Water Usage and Efficiency**

As detailed in the Civil Engineering report prepared for the project (Attachment 10) the proposal includes stormwater harvesting for on-site re-use. The facility proposes no manufacturing process and will in the context impose a low demand upon potable water usage.

The proposed stormwater harvesting provides a 100,000 litre storage capacity for collection of roof water for on-site re-use for irrigation, wash down and toilet flushing. The proposed rainwater harvesting will deliver substantial savings on potable water demand through the use on site of the harvested water. The savings on potable water use will be further augmented by installation of water efficient fixtures and fittings throughout the facility.

### **Waste Water**

Waste water will be minimal from the site as no manufacturing is proposed. The diesel storage area will be bunded with sufficient capacity to retain any spills and prevent the entry of diesel into the stormwater system.

The truck wash down area will also be bunded to collect and manage wash down water prior to its collection and discharge.

## **5.6 Air Quality and Odour**

As required by the DGRs an Environmental Air Quality Assessment has been undertaken for the proposal (Attachment 7). The assessment has been undertaken to:

- Investigate and identify any existing sources of air pollutants in the vicinity of the proposed development site;
- Review air quality monitoring data, topography and prevailing wind conditions to characterise the background ambient air environment;
- Identify the constraints and opportunities for the proposed development; and
- Provide recommendations for mitigation where required.

The assessment notes that a qualitative assessment has been undertaken as a quantitative assessment is only required in circumstances where there is a risk of adverse air quality impacts.

The sources of potential pollutants associated with the proposal which have been considered include:

- Forklift operations;
- Pick up and delivery truck movements;
- Bulk freight truck movements;
- Linehaul truck movements;
- Trucks and staff cars entering and exiting the site; and
- Construction works.

### 5.6.1 Background Air Quality

Existing background air quality has been determined by reference to data from an air quality monitoring station operated by the EPA off Mamre Road at St Marys, approximately 5km north of the subject site.

The analysis of the available NO<sub>2</sub> and PM<sub>10</sub> monitoring data for the 2012 calendar year identifies the following relevant observations:

#### Nitrogen Dioxide (NO<sub>2</sub>)

- The annual average NO<sub>2</sub> concentration for 2012 was 0.5 pphm (or 9.4 µg/m<sup>3</sup>). This lies well under the NSW EPA annual average NO<sub>2</sub> criterion of 3 pphm (or 62 µg/m<sup>3</sup>) and represents approximately 15% of the criterion; and
- The maximum daily 1-hour average NO<sub>2</sub> concentration measured during 2012 was 4.3 pphm (or 80.8 µg/m<sup>3</sup>). This lies well under the 1-hour average NO<sub>2</sub> criterion of 12 pphm (or 246 µg/m<sup>3</sup>) and represents approximately 36% of the criterion. No exceedances of the relevant criterion occurred during 2012.

#### Particulate Matter (PM<sub>10</sub>)

- The annual average PM<sub>10</sub> concentration for 2012 was 14.4 µg/m<sup>3</sup>. This lies under the NSW EPA 24-hour average PM<sub>10</sub> criterion of 30 µg/m<sup>3</sup> and represents approximately 48% of the criterion.
- The maximum 24-hour average PM<sub>10</sub> concentration measured during 2012 was 34.3 µg/m<sup>3</sup>. This represents 69% of the PM<sub>10</sub> 24-hour average criterion of 50 µg/m<sup>3</sup>. The EPA guideline for PM<sub>10</sub> allows for up to 5 exceedances per year to account for regional events such as bushfires and dust storms. No exceedances of the relevant criterion occurred during 2012.

### 5.6.2 Estimate of proposed emissions

As detailed within the assessment at Attachment 7, the modelling of the proposed construction and operation of the facility will generate the following emissions:

- An estimated total of 47,598 kg particulate matter (as PM<sub>10</sub>) will be generated during construction works at the Project site (assuming 3 months of heavy construction, followed by 9 months of construction at half that intensity). It is noted that dust is considered to be largely controllable at source through implementation of a range of dust management and control measures. Any air quality impacts during construction activities will also be short-term in nature;
- Oxides of nitrogen and carbon monoxide represent the highest emissions potential for the operational phase of the Project;
- The main source of emissions of oxides of nitrogen and carbon monoxide at the Project site will be truck movements and forklift operations respectively; and
- The facility is estimated to generate approximately 3,470 kg/year emissions of particulate matter (as PM<sub>10</sub>), 58,345 kg/year emissions of oxides of nitrogen, 53,633 kg/year emissions of carbon monoxide 5,135 kg/year emissions of VOCs and 41 kg/year emissions of sulphur dioxide.

### 5.6.3 Consideration of Impacts of Air Emissions

The air quality impact assessment concludes that the proposed construction and operations are unlikely to cause significant air quality impacts on the receiving environment given the industrial nature of Erskine Business Park and the nature of the operations.

### 5.6.4 Proposed Air Quality Mitigation Impacts

Mitigation measures proposed for the construction and operational phase of the facility to address air quality impacts recommended are summarised below.

#### **Mitigation measures recommended for the construction phase**

- Compliance with relevant Australian Standards and BCA requirements;
- Use of low-VOC paints and solvents for surface painting of buildings and other activities where feasible and practicable;
- Installation of appropriate air extraction systems for equipment/activities generating significant air pollutant emissions, and use of suitable air pollution control (APC) devices and stacks to ensure compliance with POEO Act limits and regulations;
- Fuel/oil/solvent/chemical storage areas appropriately bunded in compliance with BCA requirements and spill kits located proximal to storage areas as well as high use areas for immediate clean-up of spills and leaks for mitigation of fugitive release of VOCs;
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc. as required and in accordance with manufacturer's specifications;
- Appropriate operation of all equipment in accordance with manufacturer's specifications;
- Visual inspection of stacks during peak operation of the emergency generator, and during start-up and shutdown;
- Implementation of good housekeeping practices and standard operating procedures addressing clean up and appropriate disposal of waste materials and old containers/drums;
- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments;
- Maintenance of a complaints log including all relevant details of the complaint/complainant;
- Emissions to be minimised through the implementation of water spraying, particularly during periods of heavy on-site activity;
- Use of windbreak walls to reduce wind speeds across the Project site;
- Silt and other material be removed from around erosion and sediment control structures to ensure deposits do not become a dust source;
- Amendment of dust-generating construction activities during adverse wind conditions blowing in the direction of sensitive receptors. A wind sock should be installed and be visible to all areas of the active construction site to assist in reactive response procedures (i.e. to determine when construction activities should be postponed, minimised or relocated in windy conditions);
- Minimise the use of material stockpiles and locating them away from receptor locations (e.g. neighbouring industries);
- Reducing truck speeds on site will reduce wheel generated dust;

- If dirt track out is causing problems, manual brushing of the truck's flanks and wheels could be implemented as a further precaution. Also, trucks exiting the site should be observed to determine if the both wheels travel over the shaker grid;
- Air emissions associated with all construction activities should also be managed through compliance with a Construction Environmental Management Plan (CEMP). The CEMP would be implemented so that:
  - The works are conducted in a manner that minimises the generation of air emissions.
  - The effectiveness of the controls being implemented is monitored.
  - Additional measures are implemented where required.
  - A complaints management system is implemented so that any identified incidents or complaints are dealt with through investigation and implementation of corrective treatments.
- Construction contractors should also undertake daily environmental inspections of their works and worksite. The daily environmental inspection reports should include the below observations, with remedial or corrective actions noted (as appropriate). Any remedial or corrective actions should be reported to the Site Manager as soon as is practicable. Inspections may include, but not be limited to:
  - Visual inspection of dust generation.
  - Ensure roads leaving the site are free of soil, and prevention of soil tracking onto the road network.
  - Inspection of the erosion and sediment controls.
  - Inspection of the waste storage areas.
  - Inspection of any rehabilitated areas (where relevant).
  - Ensure all hazardous goods, including fuel and oil, are adequately stored or banded.
  - Ensure spill kits are appropriately located and stocked.

#### **Mitigation measures recommended for the operational phase**

- Compliance with relevant Australian Standards and BCA requirements;
- Use of low-VOC paints and solvents for surface painting of buildings and other activities where feasible and practicable;
- Installation of appropriate air extraction systems for equipment/activities generating significant air pollutant emissions, and use of suitable air pollution control (APC) devices and stacks to ensure compliance with POEO Act limits and regulations;
- Fuel/oil/solvent/chemical storage areas appropriately banded in compliance with BCA requirements and spill kits located proximal to storage areas as well as high use areas for immediate clean-up of spills and leaks for mitigation of fugitive release of VOCs;
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc. as required and in accordance with manufacturer's specifications;
- Appropriate operation of all equipment in accordance with manufacturer's specifications;
- Visual inspection of stacks during peak operation of the emergency generator, and during start-up and shutdown;
- Implementation of good housekeeping practices and standard operating procedures addressing clean up and appropriate disposal of waste materials and old containers/drums;
- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments;
- Maintenance of a complaints log including all relevant details of the complaint/complainant;

- Stationary trucks should switch off engines (where possible) if idling time on-site is likely to exceed two (2) minutes; and
- Provide signage and briefing to contractors, truck operators and drivers employed for transport of goods in order to create awareness of the importance of maintaining ambient air quality.

#### **Emissions to air via roof top stacks**

- Discharges of pollutants to air (i.e. from the operation of the emergency generator or from the operation of vehicles and equipment inside the warehouse) should ideally be directed through rooftop stacks discharging at least 3.0m above the ridge line of the roof to ensure maximum levels of dispersion where applicable;
- Mechanical ventilation and stack location and design should meet BCA requirements; and
- Equipment and plant air pollution control devices (i.e. for dust and particulate capture) should also be considered (particularly for indoor air quality purposes).

#### **Fugitive release of emissions from fuel and chemical storage areas**

- Storage areas for all liquids should be appropriately bunded, including dangerous goods in transit areas;
- Spill kits including absorbing materials should be provided nearby handling and storage areas;
- Empty containers should be managed and disposed of in appropriate manner; and
- Lids should be replaced on containers containing VOCs as soon as possible.

#### **The emission of products of combustion from plant and machinery**

- Control measures that may be implemented during the construction phase, where applicable, include:
  - Ensuring vehicles and machinery are maintained in accordance with manufacturer's specifications.
  - Minimising truck queuing through logistical planning of materials delivery and work practices.
  - Stationary trucks should switch off engines (where possible) if idling time on-site is likely to exceed two (2) minutes.
  - Provide signage and briefing to contractors, truck operators and drivers employed for transport of goods in order to create awareness of the importance of maintaining ambient air quality.
  - Fixed plant should be located as far from local receptors as practicable.
- Quality assurance measures and strict cleaning protocols will be implemented to avoid the transportation of dust and dirt into the facility on staff clothing and shoes, and entrainment of particulate into the facility during receivals/dispatch activities;
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc. as required and in accordance with manufacturer's specifications;
- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments;
- Maintenance of a complaints log including all relevant details of the complaint/complainant;
- Encourage and reward employees commuting to work using sustainable modes of travel (such as public transport, cycling, and car share) through the implementation of an incentive scheme and for reduction of the company's overall carbon footprint; and
- Provide facilities for cyclists such as bike storage areas, showers and lockers.

## 5.7 Waste Management

The ongoing use of the premises is supported by a Waste Management Plan (Attachment 14). The plan details that waste generated will be derived from the operation of the facility. Waste generation is expected to be minimal as the vast majority of the process carried on at the facility involve the storage and distribution of parcels and already packaged goods.

The dedicated waste storage area is located behind the landscape setback to the Lockwood Road frontage in the vicinity of the truck entrance for ease of collection by the waste contractor.

## 5.8 Greenhouse Gas

As required by the DGRs, the design of the facility has been assessed to determine the potential greenhouse gas emissions that would be generated by the operation of the facility. The assessment has determined that greenhouse gas emissions would equate to 2,782.2 tonnes per annum of CO<sub>2</sub>-e. The assessment has recommended the implementation of an Energy Efficiency Action Plan which will reduce the potential greenhouse gas emissions by 66 tonnes of CO<sub>2</sub>-e per annum.

Mitigation measure recommended for the construction phase comprise:

- Solar boosted hot water generation is proposed for the generation of Hot Water. Solar hot water generation is well suited to this development due to ample roof space and access to sunlight.

Mitigation measures recommended for the operational phase comprise:

- An Energy Savings Action plan will be prepared as detailed within the Greenhouse Gases and Energy Efficiency Plan (Attachment 13);
- The tenant will also commit to submitting an energy savings action plan and annual report detailing the progress of the Plan. The annual report will outline energy consumption for a defined 12 month period and report the status of actions and measures identified in the plan; and
- The tenant will also commit to submitting an energy savings action plan and annual report detailing the progress of the Plan. The annual report will outline energy consumption for a defined 12 month period and report the status of actions and measures identified in the plan.

## 5.9 Land Use Safety

A Dangerous Goods and Risk Assessment have been undertaken for the proposal (Attachment 6). The assessment has determined that the nature and volume of chemicals stored and used on-site does not result in the proposal being considered to be an Offensive or Hazardous Industry requiring assessment and consideration under the provisions of SEPP 33.

In addition to the SEPP 33 analysis an Environmental Risk Assessment has also been undertaken which is also include at Attachment 6. The assessment methodology is consistent with the Hazardous Industry Planning Advisory Paper (HIPAP) N0.3 Risk Assessment and AS 310000-2009.

The risk assessment has been prepared having regard to the dangerous goods handled on-site for dispatch and goods stored for use on-site.

A range of safeguards in the design and operation of the facility are proposed including:

- Maintenance of vehicles and EPA licencing of drivers;
- Provision of spill kits;
- Allowing no decanting on-site;
- Preparation of site emergency response plan;

- Appropriate emergency response equipment to be installed and maintained throughout the site;
- Bunding of storage and delivery areas; and
- Separation of chemicals within the Transit Dangerous Goods store to minimise the potential for leaks to cause dangerous reactions.

The detailed risk analysis identifies that the safeguards proposed would ensure that the environmental risk associated with the identified hazards are low.

Despite the conclusion that the risks are low, a number of recommendations have been made to ensure the risks are maintained within the low range.

The recommendations, which have been incorporated into the proposed mitigation measures at Attachment 16 include:

### **1. Vehicle Fuel/Oil Leaks**

An audit/checklist and procedure should be developed for vehicle inspection and applied at random to vehicles attending the site. The checklist should include condition of fuel and oil systems and identification of any leaks. Where leaks are identified, these should be recorded and a copy of the inspection sheet provided to the driver and forwarded to their management.

### **2. Diesel Fuel Tanks**

A hose reel with a foam attachment shall be installed on the closest hose reel to the diesel fuel tanks.

### **3. Packages and Receptacles**

To minimise the potential for the storage of damaged containers, it is recommended that a storage inspection procedure be developed that includes the inspection of all Dangerous Goods stored within the transit area to identify potential package or receptacle damage. The procedure should also include the management of damaged packages/receptacles (i.e. separation/quarantine in a safe area at the site) and the disposal of the damage products.

### **4. Transit area bund**

The transit area is to be bunded with a "speed-hump" type bund. The bund height need only be small (150mm), as the total quantity of release product would be <1,000 L, based on the largest receptacle size in the storage (e.g. IBC).

### **5. Hose Reel in Transit Area**

A foam attachment is to be installed on the fire hose reel closest to the transit store. This will assist in controlling the fire and minimise the potential for sprinkler activation. It is also recommended that the emergency response team members be trained in first attack fire fighting equipment use (e.g. extinguishers and hose reels, including foam attachments).

### **6. Fire Pump Pad**

The diesel fire pump concrete pad will be constructed with a small bund (50mm high) around the edge of the pad to retain any spills that may occur from the diesel tank or oil sump in the engine.

## 7. Fuel Tank Refilling (Fire Pumps/Emergency Gen.)

A fire pump and emergency generator diesel tank fuel refilling procedure will be developed, including response in the event of a spill. The procedure should be laminated and held in a box adjacent to the engines, along with the engine test procedures and test records.

### 5.10 Heritage

The DGRs require the consideration of heritage, including an Aboriginal cultural heritage, assessment. The site is not a heritage item or within a heritage conservation area.

Considering Aboriginal cultural heritage, the site as part of Concept Plan Approval M06\_0126, was the subject of a detailed archaeological subsurface testing program (March 2005) and a Section 90 Permit (No.2188) issued under the *National Parks and Wildlife Act 1974*, dated August 2005. The Section 90 permit authorised the destruction of Aboriginal objects in the course of undertaking the industrial development of the land.

The site works involving substantial site levelling and grading have been completed. These works have totally altered the site of the site from its pre-development condition. In the circumstance, the undertaking of further cultural heritage assessment is unwarranted in the light of approvals and works which have been undertaken on the site.

### 5.11 Visual

The site is subject to a maximum height of buildings control of 15.0m contained within Penrith DCP 2006 – Erskine Business Park. The proposed building has a maximum height of 13.7m which complies with the numerical control. The proposed building is also consistent with the objectives for the height of buildings control providing:

- The finished building heights are consistent with the existing development;
- The building has no adverse impact upon the amenity of any residential areas;
- The building will be substantially screened by the landscape set back to the north;
- The building will not adversely impact upon views from residential uses.

The scale of the proposed built form is consistent with the locality and can be built without adverse visual impact.

In considering visual impacts from night time illumination of the facility, the levels of light to be provided have been minimised to provide safe employee circulation. The lighting is designed to comply with relevant Australian Standards to minimise light spill and unnecessary glare. The physical separation of the site from residential areas further assists in mitigating this impact.

### 5.12 Biodiversity

The DGRs require that consideration of the impacts of the proposal on biodiversity be considered including identification of species on site and potential direct and indirect impacts. An assessment of direct and indirect impacts on remnant vegetation and fauna species has been undertaken (Attachment 12).

Flora and Fauna Assessments previously undertaken for the site have concluded that the development of the land would not significantly impact the status of critical habitat, threatened species and populations or endangered ecological communities listed under relevant legislation. Since these determinations, the site has been cleared and levelled. The assessment concludes that the proposed development will not threaten the status of threatened species and populations, and endangered ecological communities.

## 5.13 Cumulative Impacts

Cumulative impacts of the proposed development have been considered particularly in relation to traffic generation, noise and air quality impacts. These cumulative impacts have been undertaken having regard to the proposed development and the existing development already operating within the employment area.

### 5.13.1 Traffic Generation

The Traffic and Parking Assessment (Attachment 5) identifies that the existing and proposed road transport network will accommodate the proposed development and the traffic generated. The level of traffic generation is consistent with the scope and nature of traffic anticipated to be generated through the development of the employment area and the planned provision of supporting infrastructure which is well advanced. Accordingly, in regards to transport network infrastructure, no upgrades or augmentation works are required.

### 5.13.2 Air Quality

The potential impacts upon air quality from construction and operational phases have been considered in the Environmental Air Quality Assessment prepared in support of the application (Attachment 7). This assessment has considered air quality impacts in the local context to determine the potential cumulative impacts. The assessment has determined that the impact to the local air quality will not result in unacceptable impacts.

### 5.13.3 Noise Impacts

The Noise Impact Assessment (Attachment 8) has undertaken monitoring of the current acoustic environment, which includes the operation of existing facilities within the estate. This background monitoring has enabled the operation of the proposed facility to be modelled operating to and contributing to the acoustic environment to determine if impacts beyond established thresholds are breached. The modelling has determined that through the implementation of minor management initiative the facility will be able to operate 24 hours per day without adverse impacts to sensitive residential receivers or existing industrial and manufacturing uses in the vicinity. The assessment has determined that no ameliorative measures are required or necessary to address any cumulative impacts arising from the consideration of potential noise impacts.

## 5.14 Consultation

In preparing the Director-General's Requirements, the Department of Planning and Infrastructure and the following agencies provided input on their requirements for an environmental impact statement (EIS) for the proposed development:

- Penrith City Council (Council);
- NSW Department of Primary Industries (DPI) – NSW Office of Water
- Roads and Maritime Services (RMS);
- NSW Department of Primary Industries (DPI); and
- Sydney Water.

Each agency responded with detailed requirements which have been addressed in the EIS.

The Director-General's Requirements required that the following agencies be consulted regarding the proposal and any matters to be addressed in the preparation of the EIS:

- Penrith City Council (Council);
- Roads and Maritime Services (RMS);
- Sydney Water; and
- NSW Department of Primary Industries (DPI).

Commercial & Industrial Property Pty Ltd (CIP) (the Proponent) or its consultants have directly consulted with RMS; Council; Sydney Water and DPI (NSW Office of Water). The results of this further consultation are outlined below.

#### 5.14.1 Roads and Maritime Services

On 11 July 2013, senior staff from The GPT Group (landowner), Transport and Traffic Planning Associates (traffic consultant) and CIP met RMS to discuss the specific requirements of RMS for traffic modelling in the Erskine Park Industrial Estate. The project traffic consultant raised the following issues at the meeting:

- The future traffic circumstances on the road system serving Erskine Park are addressed in the studies undertaken by RMS for the Erskine Park Link Road;
- The traffic generation outcome with the development outcome at Erskine Park (some 700,000m<sup>2</sup> GFA) is significantly less than that envisaged in the road planning; and
- The proposed developments are entirely consistent with the planning for the area and traffic modelling is irrelevant because development on the sites has been taken into account in the RMS studies.

At the meeting, RMS generally supported the proposal but stated they would review the results from their recent Erskine Park Link Road studies then determine if additional traffic modelling is required after their initial review of the EIS.

#### 5.14.2 Penrith City Council

On 18 July 2013, senior staff representing The GPT Group, the business operator, and CIP met Penrith City Council Mayor, Deputy Mayor, Council's group managers and senior staff to discuss the proposed development. The key items/outcomes included:

- An overview of the business operations, objectives and planned capital expenditure;
- Explanation of 24/7 operations employing approximately 450 full-time jobs sourced from a ready workforce in Western Sydney; and
- Council is fully supportive of the proposal but requested we liaise with the surrounding businesses in Erskine Park Industrial Estate, including Bluescope Steel, and investigate potential synergies/opportunities with the skilling and learning centre at Ropes Creek.

#### 5.14.3 Sydney Water

LandPartners have liaised with Sydney Water to obtain their requirements for the development and confirm availability of essential services. This is reflected in the reports in Attachment 11.

#### 5.14.4 Ongoing Consultation

Further consultation has been undertaken with the following businesses in the Erskine Park Industrial Estate:

- Bluescope Steel;
- Goodman Fielder;
- Target;
- Strand Bags;
- Midway Metals; and
- Keith Engineering.

A subsequent supplementary report will be provided to the Department detailing the outcomes of this further consultation.

#### 5.15 Agency EIS Requirements

The responses to the request for DGR's were received from:

- Sydney Water;
- Roads and Maritime Services;
- NSW Office of Water; and
- Penrith City Council.

The matters raised by each agency are addressed below.

##### ***Sydney Water***

Sydney Water requires consideration in:

- Integrated Water Management Plan (IWMP); and
- Infrastructure Management Plan (IMP).

The application is not supported by a specific IWMP as the facility has no manufacturing and will have a low demand upon potable water. Despite this on-site stormwater harvesting is proposed to provide alternative water sources to potable water for irrigation, wash down and toilet flushing.

This is consistent with the WSUD principles to be implemented, potable water use reductions, water reuse options and water conservation measures that would be contained within an IWMP.

The services report prepared by LandPartners (Attachment 11) identifies that sufficient capacity is available to service the site for waste water services. The report also confirms the capacity for the site to be supplied with potable water.

##### ***Roads and Maritime Services***

The Traffic and Transport Study prepared by TTPA (Attachment 5) has addressed the matters raised by RMS.

### ***NSW Office of Water***

The comments from NSW Office of Water raised a number of issues relating to:

- Water sharing plans;
- Licensing considerations;
- Surface Water and groundwater assessment;
- Watercourse and riparian land; and
- Groundwater dependent ecosystems.

The proposal does not involve any groundwater extraction or extraction and use from riparian streams. The proposal will provide a temporary sediment basin. The development will involve the installation of OSD tanks and water quality measures as detailed by Costin Roe (Attachment 10). Accordingly, no water licensing is required. Similarly, surface water and groundwater assessment is not required as the proposal does not include dams or water management structures.

### ***Penrith City Council***

Penrith City Council sought confirmation on matters relating to:

- Boundary landscape treatments;
- Fencing details; and
- Building design particularly the warehouse building

In regard to the warehouse building, the structure is setback a minimum 40.0m from the Lockwood Road frontage and is a utilitarian building designed for a specific purpose and is a functional response to the tenant requirements. The elevation has been relieved through the use of varying colours for the external cladding. The design of the office and car park structure has employed external expression of irregular aluminium columns to provide visual interest to the decked car park.

## 6.0 Conclusion

The proposal for a TNT warehouse and distribution facility is a use consistent with the Western Sydney Employment Area objectives. This Environmental Impact Assessment (EIS) and attachments have been prepared to consider the potential environmental, economic and social impacts of the proposal. The EIS has addressed the matters to be considered set out in the Director General's Requirements issued on 26 July 2013.

The proposed development is considered to be suitable for approval and justified in the circumstances as:

- The proposal is permitted with consent in the zone and is consistent with the relevant planning controls that apply to the site;
- The proposal is consistent with the objectives for the facilitation and encouragement of large scale employment generating land in the Western Sydney Employment Area;
- The proposal does not conflict with the terms of Concept Plan Approval (MP06-0216) which established the development platform to be utilised by the development;
- The site is serviced by all necessary utilities to support the proposed facility;
- The facility can be built and operated without adverse impact to the environment or the amenity of the locality; and
- Approval of the facility will deliver short term construction and long term on site employment commensurate with the investment in the establishment of the Western Sydney Employment Area.

The proposal has demonstrated considerable merit and will deliver significant economic and social benefits, accordingly support and approval of the application is recommended.



Attachments

Attachment 1: DGRs and Concept Plan MP 06\_0216

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# Attachment 2: QS Reports

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# Attachment 3: Architectural and Landscape Design Package

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# Attachment 4: SEPP 55 Assessment

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# Attachment 5: Transport and Traffic Assessment

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# Attachment 6: Dangerous Goods Assessment and Environmental Risk Assessment

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# Attachment 7: Environmental Air Quality Assessment

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# Attachment 8: Noise and Vibration Report

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# Attachment 9: BCA Report

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# Attachment 10: Civil Engineering Report

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# Attachment 11: Services Report

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# Attachment 12: Biodiversity Report

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# Attachment 13: Greenhouse Gas Assessment

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# Attachment 14: Waste Management Plan

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Attachment 15: Director Generals letter regarding contributions

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# Attachment 16: Mitigation Measures

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The measures proposed to mitigate the potential impacts associated with the construction and operation of the proposed Warehouse Distribution and Transport Depot for TNT Australia P/L are detailed in the following section.

The proposed measures have been compiled from the assessment in Section 4.0 and are detailed within the attached consultant reports.

### **Dangerous Goods storage**

Mitigation measures recommended for the construction phase:

The Dangerous Goods storage area be reviewed and approved by a “competent person” under the provisions of the *Work Health and Safety Act 2011* prior to any Occupation Certificate for the facility being issued.

### **Environmental Risk Management**

Mitigation measures proposed for the management of the environmental risk management in the operational phase of the facility summarised below.

Mitigation measures recommended for the operational phase:

#### **1. Vehicle Fuel/Oil Leaks**

An audit/checklist and procedure should be developed for vehicle inspection and applied at random to vehicles attending the site. The checklist should include condition of fuel and oil systems and identification of any leaks. Where leaks are identified, these should be recorded and a copy of the inspection sheet provided to the driver and forwarded to their management.

#### **2. Diesel fuel tanks**

A hose reel with a foam attachment shall be installed on the closest hose reel to the diesel fuel tanks.

#### **3. Packages and receptacles**

To minimise the potential for the storage of damaged containers, it is recommended that a storage inspection procedure be developed that includes the inspection of all Dangerous Goods stored within the transit area to identify potential package or receptacle damage. The procedure should also include the management of damaged packages/receptacles (i.e. separation/quarantine in a safe area at the site) and the disposal of the damage products.

#### **4. Transit area bund**

The transit area is to be bunded with a “speed-hump” type bund. The bund height need only be small (150mm), as the total quantity of release product would be <1,000 L, based on the largest receptacle size in the storage (e.g. IBC).

#### **5. Hose Reel in Transit Area**

A foam attachment is to be installed on the fire hose reel closest to the transit store. This will assist in controlling the fire and minimise the potential for sprinkler activation. It is also recommended that the emergency response team members be trained in first attack fire fighting equipment use (e.g. extinguishers and hose reels, including foam attachments).

## 6. Fire Pump Pad

The diesel fire pump concrete pad will be constructed with a small bund (50mm high) around the edge of the pad to retain any spills that may occur from the diesel tank or oil sump in the engine.

## 7. Fuel Tank Refilling (fire pumps/Emergency Gen.)

A fire pump and emergency generator diesel tank fuel refilling procedure will be developed, including response in the event of a spill. The procedure should be laminated and held in a box adjacent to the engines, along with the engine test procedures and test records.

## Air Quality and Odour Mitigation Measures

Mitigation measures proposed for the construction and operational phase of the facility to address air quality impacts recommended are summarised below.

Mitigation measures recommended for the construction phase:

- Compliance with relevant Australian Standards and BCA requirements.
- Use of low-VOC paints and solvents for surface painting of buildings and other activities where feasible and practicable.
- Installation of appropriate air extraction systems for equipment/activities generating significant air pollutant emissions, and use of suitable air pollution control (APC) devices and stacks to ensure compliance with POEO Act limits and regulations.
- Fuel/oil/solvent/chemical storage areas appropriately bunded in compliance with BCA requirements and spill kits located proximal to storage areas as well as high use areas for immediate clean-up of spills and leaks for mitigation of fugitive release of VOCs.
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc as required and in accordance with manufacturer's specifications.
- Appropriate operation of all equipment in accordance with manufacturer's specifications.
- Visual inspection of stacks during peak operation of the emergency generator, and during start-up and shutdown.
- Implementation of good housekeeping practices and standard operating procedures addressing clean up and appropriate disposal of waste materials and old containers/drums.
- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments.
- Maintenance of a complaints log including all relevant details of the complaint/complainant.
- Emissions to be minimised through the implementation of water spraying, particularly during periods of heavy on-site activity.
- Use of windbreak walls to reduce wind speeds across the Project site.
- Silt and other material be removed from around erosion and sediment control structures to ensure deposits do not become a dust source.
- Amendment of dust-generating construction activities during adverse wind conditions blowing in the direction of sensitive receptors. A wind sock should be installed and be visible to all areas of the active construction site to assist in reactive response procedures (i.e. to determine when construction activities should be postponed, minimised or relocated in windy conditions).

- Minimise the use of material stockpiles and locating them away from receptor locations (e.g. neighbouring industries).
- Reducing truck speeds on site will reduce wheel generated dust.
- If dirt track out is causing problems, manual brushing of the truck's flanks and wheels could be implemented as a further precaution. Also, trucks exiting the site should be observed to determine if the both wheels travel over the shaker grid.
- Air emissions associated with all construction activities should also be managed through compliance with a Construction Environmental Management Plan (CEMP). The CEMP would be implemented so that:
  - The works are conducted in a manner that minimises the generation of air emissions.
  - The effectiveness of the controls being implemented is monitored.
  - Additional measures are implemented where required.
  - A complaints management system is implemented so that any identified incidents or complaints are dealt with through investigation and implementation of corrective treatments.
- Construction contractors should also undertake daily environmental inspections of their works and worksite. The daily environmental inspection reports should include the below observations, with remedial or corrective actions noted (as appropriate). Any remedial or corrective actions should be reported to the Site Manager as soon as is practicable. Inspections may include, but not be limited to:
  - Visual inspection of dust generation.
  - Ensure roads leaving the site are free of soil, and prevention of soil tracking onto the road network.
  - Inspection of the erosion and sediment controls.
  - Inspection of the waste storage areas.
  - Inspection of any rehabilitated areas (where relevant).
  - Ensure all hazardous goods, including fuel and oil, are adequately stored or banded.
  - Ensure spill kits are appropriately located and stocked.

Mitigation measure recommended for the operational phase:

- Compliance with relevant Australian Standards and BCA requirements.
- Use of low-VOC paints and solvents for surface painting of buildings and other activities where feasible and practicable.
- Installation of appropriate air extraction systems for equipment/activities generating significant air pollutant emissions, and use of suitable air pollution control (APC) devices and stacks to ensure compliance with POEO Act limits and regulations.
- Fuel/oil/solvent/chemical storage areas appropriately banded in compliance with BCA requirements and spill kits located proximal to storage areas as well as high use areas for immediate clean-up of spills and leaks for mitigation of fugitive release of VOCs.
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc as required and in accordance with manufacturer's specifications.
- Appropriate operation of all equipment in accordance with manufacturer's specifications.
- Visual inspection of stacks during peak operation of the emergency generator, and during start-up and shutdown.
- Implementation of good housekeeping practices and standard operating procedures addressing clean up and appropriate disposal of waste materials and old containers/drums.

- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments.
- Maintenance of a complaints log including all relevant details of the complaint/complainant.
- Stationary trucks should switch off engines (where possible) if idling time on-site is likely to exceed 2 minutes.
- Provide signage and briefing to contractors, truck operators and drivers employed for transport of goods in order to create awareness of the importance of maintaining ambient air quality.

#### Emissions to Air via Roof top Stacks

- Discharges of pollutants to air (i.e. from the operation of the emergency generator or from the operation of vehicles and equipment inside the warehouse) should ideally be directed through rooftop stacks discharging at least 3 m above the ridge line of the roof to ensure maximum levels of dispersion where applicable.
- Mechanical ventilation and stack location and design should meet BCA requirements.
- Equipment and plant air pollution control devices (i.e. for dust and particulate capture) should also be considered (particularly for indoor air quality purposes).

#### Fugitive Release of Emissions from Fuel and Chemical Storage Areas

- Storage areas for all liquids should be appropriately bunded, including dangerous goods in transit areas.
- Spill kits including absorbing materials should be provided nearby handling and storage areas.
- Empty containers should be managed and disposed of in appropriate manner.
- Lids should be replaced on containers containing VOCs as soon as possible.

#### The Emission of Products of Combustion from Plant and Machinery

- Control measures that may be implemented during the construction phase, where applicable, include:
  - Ensuring vehicles and machinery are maintained in accordance with manufacturer's specifications.
  - Minimising truck queuing through logistical planning of materials delivery and work practices.
  - Stationary trucks should switch off engines (where possible) if idling time on-site is likely to exceed 2 minutes.
  - Provide signage and briefing to contractors, truck operators and drivers employed for transport of goods in order to create awareness of the importance of maintaining ambient air quality.
  - Fixed plant should be located as far from local receptors as practicable.
- Quality assurance measures and strict cleaning protocols will be implemented to avoid the transportation of dust and dirt into the facility on staff clothing and shoes, and entrainment of particulate into the facility during receivals/dispatch activities;
- Regular inspection, maintenance and cleaning of equipment, extraction systems, ductwork, and air pollution control devices, exhaust fans etc. as required and in accordance with manufacturer's specifications;
- Provision of a concise Environmental Management Plan (EMP) outlining operating procedures, internal checking protocols, staff training requirements and awareness of air quality control measures and other environmental initiatives and commitments;
- Maintenance of a complaints log including all relevant details of the complaint/complainant;
- Stack emissions testing should be performed to ensure compliance with POEO Act limits;
- Encourage and reward employees commuting to work using sustainable modes of travel (such as public transport, cycling, and car share) through the implementation of an incentive scheme and for reduction of the company's overall carbon footprint;

- Provide facilities for cyclists such as bike storage areas, showers and lockers;

### **Noise Mitigation Measures**

Mitigation measures recommended for the construction phase:

- Scheduling construction activities such that the concurrent operation of plant is limited;
- Preparation of a construction noise management plan (to be included in the project Environmental Management Plan) prior to construction to ensure that all employees understand and take responsibility for noise control at site;
- Properly maintaining plant to ensure rated noise emission levels are not exceeded;
- Undertaking construction activities guided by AS2436-1981 "Guide to Noise Control on Construction, Maintenance and Demolition Sites"; and
- Providing a contact telephone number via which the public may seek information or make a complaint. A log of complaints should be maintained and actioned by the site superintendent in a responsive manner.

Mitigation measure recommended for the operational phase:

- Scheduling truck movements and loading dock operations such that concurrent operation of vehicles is minimised. This would include limiting onsite vehicle idling while loading; and
- Preparation of an operational noise management plan (to be included in the project Environmental Management Plan) prior to operation to ensure that all employees understand and take responsibility for noise control at site.
- closing roller doors at the north facade when not in use during the evening and night-time period; and
- preparation of an operational noise management plan (to be included in the project Construction Environmental Management Plan) prior to operation to ensure that all employees understand and take responsibility for noise control at site.

### **Soil and Water Mitigation Measures**

Mitigation measure recommended for the construction phase:

- An Erosion and Sediment Control Plan (ESCP) consistent with drawings Co12156.00-DA20 prepared by Costin Roe (Attachment 10) is to be prepared and approved by the PCA prior to the commencement of any works on-site. The ESCP will have regard for the recommendations contained within the Civil Engineering report prepared by Costin Roe (Attachment 10);
- Efficient fixtures and fitting will be installed throughout the facility to minimise site water consumption;
- A 100,000L rainwater harvesting system will be provided for the site. Due to the large catchment area, the rainwater harvesting system will provide a significant contribution to the non potable water demands for the site; and
- Adequate bunding and containment measures will be adopted to prevent potential chemical spills from entering the waste water or stormwater systems

### **Greenhouse Gas Mitigation Measures**

Mitigation measure recommended for the construction phase:

- Solar boosted hot water generation is proposed for the generation of Hot Water. Solar hot water generation is well suited to this development due to ample roof space and access to sunlight;

Mitigation measures recommended for the operational phase:

- An Energy Savings Action plan will be prepared as detailed within the Greenhouse Gases and Energy Efficiency Plan (Attachment 13);
- The tenant will also commit to submitting an energy savings action plan and annual report detailing the progress of the Plan. The annual report will outline energy consumption for a defined 12 month period and report the status of actions and measures identified in the plan; and
- The tenant will also commit to submitting an energy savings action plan and annual report detailing the progress of the Plan. The annual report will outline energy consumption for a defined 12 month period and report the status of actions and measures identified in the plan.