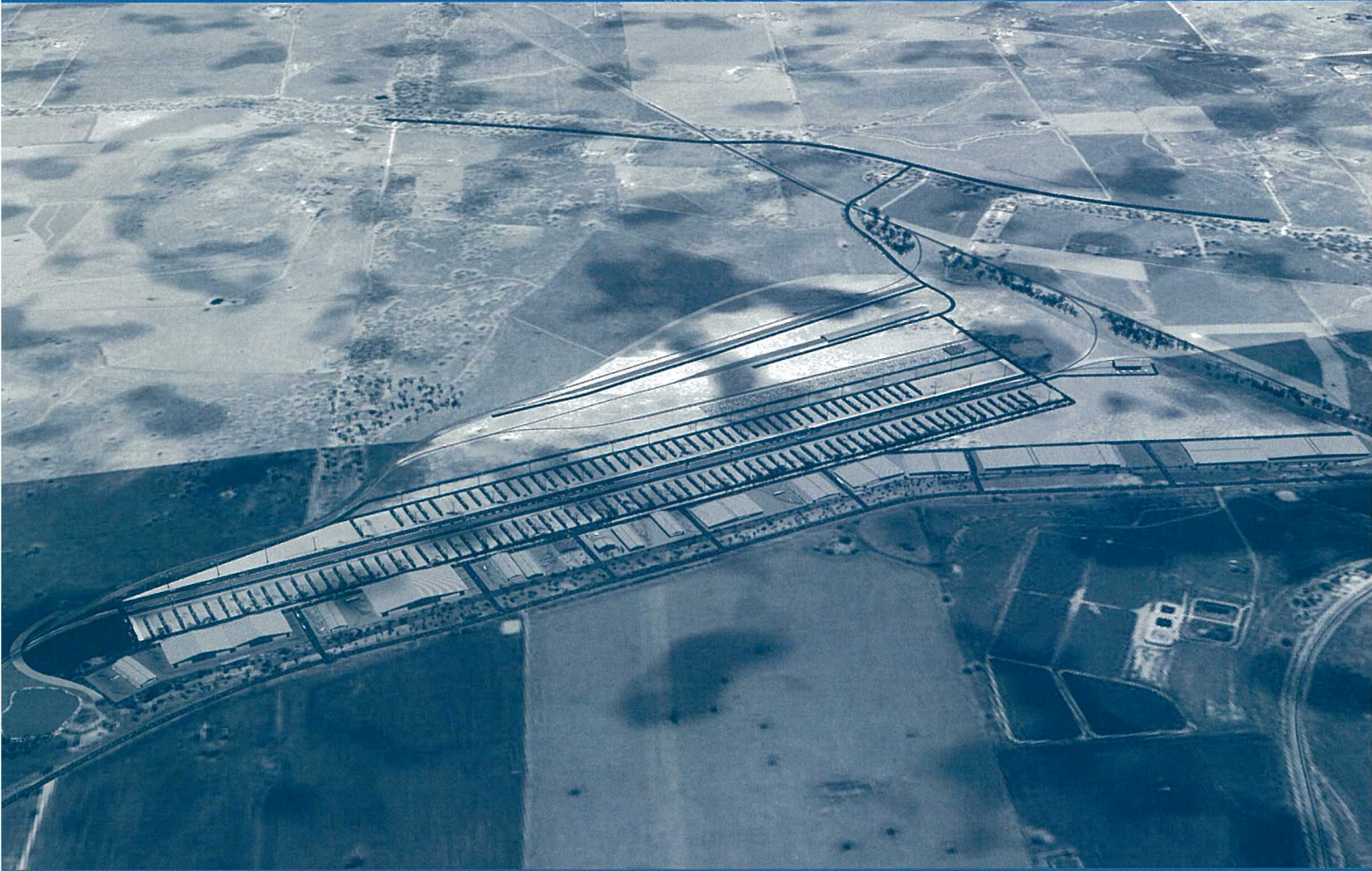




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PART D CONCLUSION





9. Draft Statement of Commitments

Section 75F(6) of the EP&A Act states that 'the Director-General may require the proponent to include in an environmental assessment a statement of the commitments the proponent is prepared to make for environmental management and mitigation measures on the site.' In accordance with this requirement, the section provides Terminals Australia commitments for environmental mitigation, management and monitoring for the project.

As described earlier, concept approval is sought for the entire intermodal terminal. Subsequent applications will be submitted for individual elements of the intermodal terminal as they come to fruition and will include a detailed environmental assessment of the project design.

9.1 Mitigation measures

Terminals Australia commits to implement the measures outlined in Table 9.1 to minimise the potential for environmental impacts.

Table 9.1 Mitigation measures

Outcome	Mitigation measure	Timing
<i>Traffic & transport</i>		
Construction traffic movements operate in a safe environment.	» An on-site traffic management plan would be prepared as part of the Construction Environmental Management Plan to manage construction traffic.	Construction
The existing road network is upgraded to provide a safe operating environment for existing road users and traffic generated by the proposal.	<ul style="list-style-type: none"> » The Intersections listed below, which are deemed to be directly impacted by container movement generated or redistributed to the proposal, would be evaluated: <ul style="list-style-type: none"> – Brolgan Road with the West lime Road (Western Section of the Parkes Ring Road); – Condobolin Road with West Lime Road; – Newell Highway (Forbes Street) and Hartigan Avenue; and – Hartigan Avenue with Blaxland Street. » Existing level crossings situated along Brolgan Road and Condobolin Road would be upgraded to incorporate road design specification to accommodate B double and road trains, advanced warning signs and flashing lights. » A new level crossing point would be situated along Brolgan Road to the west of the proposed development, which would incorporate advanced warning signs, boom gates and flashing lights. 	<p>Design</p> <p>Operation</p> <p>Operation</p>
<i>(Continued)</i>	» Brolgan Road, between the western section of the Parkes ring road system and the proposed western most site access point, would be upgraded to incorporate road design specification to accommodate B double and road trains. It is understood that it would be desirable to provide two 3.5m wide traffic lanes with a shoulder width of 2.0m and 1.0m of this being sealed.	Operation

Outcome	Mitigation measure	Timing
	<ul style="list-style-type: none"> » Provide appropriate high quality intersection along Condobolin Road. The intersection should be designed to accommodate B double and road train type vehicle. Based on the guidelines specified in the <i>Austroads Part 5: 'Intersections at Grade'</i> it would be desirable to provide types 'AUR' or 'CH' intersection layout. 	
Safe site access is provided.	<ul style="list-style-type: none"> » Appropriate high quality intersections, such as type 'AUR' and 'CH' intersections, would be installed at access points to the site along Brolgan Road. 	Operation
Timing	<ul style="list-style-type: none"> » All of the above except the new access point onto to Condobolin Road should be undertaken in the initial stage of site development with the Condobolin Road provided in the Ultimate Stage. 	Initial & Ultimate Stage
Further traffic investigations	<p>The study identifies that the analysis is based on a preliminary level of information and a series of assumption, which will only be confirmed once an operator for the facility is identified. The proposed operator will have the understanding of the resulting traffic impacts produced from each stage of the proposed development. These impacts should be identified and addressed with the submission of Development Applications for each facility proposed to be located in the Parkes Intermodal Terminal. The supporting detailed traffic impact statement will as part of this exercise address issues associated with the following:</p> <ul style="list-style-type: none"> » Proposed truck routes at each stage of the development; » Intersection upgrades at each stage of the development; and » Level crossings at each stage of the development. 	Prior to lodgement of subsequent applications.

Outcome	Mitigation measure	Timing
Noise		
Construction noise managed.	<ul style="list-style-type: none"> » All combustion engine plant, such as generators, compressors and welders should be checked to ensure they produce minimal noise with particular attention to residential grade exhaust silencers; » Vehicles would be kept properly serviced and fitted with appropriate mufflers. The use of exhaust brakes would be eliminated, where practicable; » Where practical, all vehicular movements to and from the construction site must be made only during normal working hours; » Where practical, machines should be operated at low speed or power and would be switched off when not being used rather than left idling for prolonged periods. » Machines found to produce excessive noise compared to industry best practice should be removed from the site or stood down until repairs or modifications can be made. » Where practical, impact wrenches should be used sparingly with hand tools or quiet hydraulic torque units preferred. 	Construction
Traffic noise managed during construction and operation.	<ul style="list-style-type: none"> » With regard to potential traffic noise, by keeping vehicles serviced, fitted with mufflers, eliminating exhaust brake usage and posted speed limits, noise due to trucking activity associated with the operation and construction of the terminal can be significantly mitigated. 	Construction, operation
Operational noise managed.	<ul style="list-style-type: none"> » Best practice noise management measures would be implemented to control operational noise. 	Operation

Outcome	Mitigation measure	Timing
<i>Water quality</i>		
Quality and flows of receiving waters are protected during construction.	» A construction phase soil and water management plan, detailing stormwater management strategies, would be developed and implemented in accordance with Section 7.3.3 to minimise erosion, sedimentation and pollution.	Construction
Quality and flows of receiving waters are protected during operation.	» Site drainage and stormwater management features would be designed in accordance with the concept stormwater management plan shown in Figure 7-20.	Design, operation
Opportunities for reuse/recycling of water are maximised.	» The following would be provided: <ul style="list-style-type: none"> – Stormwater retention strategies; – Rainwater harvesting (roof water and on ground stormwater); and – Management and monitoring of onsite activities and infrastructure. 	Operation
<i>Land use safety</i>		
Transportation and on-site storage of hazardous materials to remain below SEPP 33 storage or transport thresholds for Class 3PGII hazardous materials.	<p>The proposed development would be designed in accordance with AS1940, incorporating the requirements outlined in Section 7.4.2 relating to:</p> <ul style="list-style-type: none"> » Separation distances; » Bunding requirements; and » Fire protection requirements. 	Design, construction, operation

Outcome	Mitigation measure	Timing
<i>Non-indigenous heritage</i>		
Compliance with requirements under Section 139(4a) of the NSW Heritage Act.	<ul style="list-style-type: none"> » An exception notification would be lodged, together with this report as the supporting documentation, with the NSW Heritage Office seeking exception under Section 139(4a) of the NSW Heritage Act. » Acceptance of that notification would be received prior to the commencement of construction taking place. 	Construction
Recording of non-indigenous heritage.	<ul style="list-style-type: none"> » A photographic record of the Farm Complex and its key components would be taken before and during the proposed works. Copies of these records would be forwarded to the NSW Heritage office and to Parkes Shire Council. 	Construction
<i>Indigenous heritage</i>		
Indigenous heritage sites and artefacts are protected.	<ul style="list-style-type: none"> » Should any Indigenous artefacts be unearthed during construction, works within the immediate vicinity of the find would temporarily cease and move to another area of the site (allowing for a curtilage of at least 50 metres), and DEC would be contacted, and permission sought from the relevant Aboriginal organisations to collect the items. 	Construction
<i>Flora & Fauna</i>		
Natural ecosystems surrounding the site are protected from construction impacts.	<ul style="list-style-type: none"> » The development area boundary would be clearly defined to prevent construction works breaching the site boundaries and potentially impacting adjacent vegetation. 	Construction
	<ul style="list-style-type: none"> » Stockpiles would be placed away from the woodland at the site. 	Construction
Habitat values are preserved and protected.	<ul style="list-style-type: none"> » Soil that may contain seeds of exotic species, would be placed away from the woodland where they could be spread during wind or rainfall events. 	Construction
	<ul style="list-style-type: none"> » Where possible, the removal of mature and hollow-bearing trees at the site would be avoided. 	Construction

Outcome	Mitigation measure	Timing
	» Stock from the remaining woodland at the site would be removed to allow natural regeneration.	Construction
	» Initial and continual treatment of weeds within the woodland and potential rehabilitation.	Construction, operation
<i>Bushfire</i>		
Reduce the threat at the site and on adjacent lands and property.	» The principles of <i>Planning for Bushfire Protection</i> (PBP) (Planning NSW), 2001, would be applied to the proposal where appropriate.	Design, construction, operation

Outcome	Mitigation measure	Timing
Asset Protection Zones provide clear zone between vegetation (fuel for bushfires) and the development, reducing opportunities for fire to spread quickly.	<ul style="list-style-type: none"> » Based on the vegetation class present at the site an Asset Protection Zone of 20 m is recommended. Road and fire trails may form part of the APZ and therefore reduce the need for further vegetation clearance. » A fire trail would be incorporated into the APZ and would include the following attributes: <ul style="list-style-type: none"> – located within a minimum 6 m wide reserve (4 m wide trail and 1 m wide cleared area each side of the trail); – constructed in accordance with design criteria outlined in Section 5.2.2 of PBP; – be trafficable by firefighting vehicles under all weather conditions; – appropriate drainage and erosion controls; – not traverse any wetlands or other land potentially subject to periodic inundation; – should link to Brolgan Road; – be maintained in a serviceable and accessible condition at all times; and – have passing bays at regular intervals of 200 m. » Any vegetation within the APZ, which in this case is likely to be grasses, would be managed through regular mowing. 	Design

Outcome	Mitigation measure	Timing
Appropriate site access for firefighting vehicles to access site, and for evacuation of site during construction and operation.	<ul style="list-style-type: none"> » Access to the site would be established and maintained and include a perimeter fire trail. This is a managed fire trail surrounding the buildings and incorporated within the 20 m APZ measured from the edge of the building. If Brolgan Road is within 20 m of a building and meets the bushfire standards, then construction of a perimeter access trail on this side of the building is not required. » This would include the following attributes: <ul style="list-style-type: none"> – a minimum trafficable width of 4 m with an additional 1m wide strip on each side of the road kept clear of bushes and long grass; – the road should have a passing bay about every 200 m where possible, which should be 20 m long by 3 m wide, making a minimum trafficable width of 7 m at the passing bay; – the capacity of the road should be sufficient to carry fully loaded firefighting vehicles (approximately 28 tonnes or 9 tonnes per axle); – a minimum vertical clearance of 6 m to any overhanging obstructions, including tree branches; – curves should have a minimum inner radius of 6 m and be minimal in number to allow for rapid access and escape; – the minimum distance between inner and outer curves should be 6 m; – roads would provide sufficient width to allow firefighting vehicle crews to work with firefighting equipment around the vehicle. » If possible two access roads to the site are recommended along paths that are unlikely to be cut simultaneously by fire and therefore ensure there is at least one safe evacuation point. 	Design, construction, operation
Adequate water supply for potential firefighting during operation.	<ul style="list-style-type: none"> » Appropriate watering points would be provided along the perimeter trail from a series of fire hydrants. These hydrants would meet the requirements of Australian Standard 2419–<i>Fire Hydrant Installation</i> and be delivered by a ring main system. 	Operation

Outcome	Mitigation measure	Timing
<i>Air quality</i>		
Air quality is protected during construction.	<ul style="list-style-type: none"> » An Air Quality Management Plan would be prepared for the construction phase of the proposal, and would be included as part of the CEMP. <p>All activities undertaken would be carried out in a manner, as outlined in Section 8.8.4, that minimises:</p> <ul style="list-style-type: none"> » Air pollution; » Dust generation; and » Emission of dust from the site (wind-blown, from transit or traffic generated). 	Construction
Air quality is protected during operation.	<ul style="list-style-type: none"> » Tree planting would be undertaken on the site, hence reducing CO² levels in the atmosphere. » All activities undertaken would be carried out in a manner that minimises emission of pollutants and dust, as outlined in Section 8.8.4. » Terminals Australia would promote government initiatives such as the Alternative Fuels Conversion Programme, that are designed to assist operators and manufacturers of heavy commercial vehicles to convert to Natural Gas or Liquefied Petroleum Gas (LPG). 	<p>Design, operation</p> <p>Design, operation</p>
<i>Visual amenity and landscape</i>		
The visual impact of the proposal on the landscape would be minimised.	<ul style="list-style-type: none"> » Existing vegetation, outside the areas required to be cleared for the development, would be retained. » Additional planting would be provided to screen the development, from the inception of construction if possible. 	<p>Design, construction</p> <p>Operation</p>

Outcome	Mitigation measure	Timing
	<ul style="list-style-type: none"> » Appropriate building materials and treatments would be chosen, including: <ul style="list-style-type: none"> – Minimal use of reflective elements, and use of textual cladding where practicable; and – Use of green/brown colour tones on the buildings (including the upper portion of built elements) to minimise the contrast with surrounding bushland. 	Design
<i>Socio-economic</i>		
Procedures are in place to ensure that any social impacts are minimised and can be dealt with without delay.	<p>A consultation and communication plan would be developed covering the local residents and wider community to ensure employment opportunities for the local community are maximised and to detail activities to be implemented in the lead up to, and during implementation of the proposal.</p> <p>Consultation tools used would include:</p> <ul style="list-style-type: none"> » Ongoing liaison with the community, Council and local businesses; » A community hotline to enable response to questions, complaints etc; » Regular meetings with key stakeholders and the community in Parkes. This should include discussions with local businesses regarding economic and employment opportunities; » Project newsletter/information sheets distributed to surrounding landowners, businesses and residents; and » A project information signboard erected in the vicinity of the site providing regular updates on the progress of the proposal, contact details etc. 	Design, construction, operation
<i>Waste management</i>		
Minimise construction waste.	<ul style="list-style-type: none"> » Minimise cut and fill. If this cannot be avoided, reuse excavated material onsite. 	Design

Outcome	Mitigation measure	Timing
	» Include waste management clauses in contracts to ensure contractors are aware of the waste management targets and objectives of the development and their obligations.	Construction
	» If possible, design for standard sizes, this avoids unnecessary offcuts and waste generation.	Design
<i>(Continued)</i>	» Use pre-fabricated components. Usually, pre-fabricated components are delivered to site where they are assembled, saving money and reducing onsite waste.	Design, construction
	» Specify for materials that are easily reusable and recyclable, avoiding potential future waste.	Design, construction
	» Design for disassembly to ensure the buildings are able to be easily taken apart, thus facilitating future resource recovery.	Design
	» Look at ways of using materials that have recycled content.	Construction
	» Avoid specifying and ordering potentially harmful substances and materials.	Design, construction
	» Arrange supplier take-back for excess or damaged material and for excess packaging.	Construction
	» The type and the volumes of waste expected to be generated by the operation of the proposed development would be calculated during the detailed design phase to ensure adequate waste storage facilities are provided on site. This would include waste generated from the office, landscaped areas, refuelling facilities and warehousing and distribution activities.	Design
	» Waste storage areas would be required on site. These would have sufficient room to store the required containers to accommodate the estimated quantity of waste and recyclables generated and to allow for manoeuvrability.	Design

Outcome	Mitigation measure	Timing
<i>(Continued)</i>	» Waste storage areas would be undercover and drained to sewer.	Design
	» Terminals Australia needs to select appropriate waste handling equipment and the design has to allow adequate space for onsite separation, storage and manoeuvring of waste prior to collection and transport.	Design
	» Adequate space would be required for the storage of containers of at least three waste streams – recovered waste (for reuse or recycling), residual waste (for disposal or Alternative Waste Technology) and hazardous waste (wastes that are toxic, corrosive, flammable, explosive or reactive).	Design
	» A separate storage area would be designed for liquid wastes (oils etc) that would be banded and drain to grease traps. Liquid wastes from grease traps must only be removed by a licensed contractor approved by the relevant water authority or NSW DEC.	Design
	» Adequate space for bulky items would be provided.	Design
	» A separate storage and collection area for hazardous/ special wastes would be provided.	Design
	» Waste storage areas and wash down areas would have smooth, impervious floors, be graded to a silt trap and connected to the sewer.	Design
	» The site would have adequate drainage.	Design
	» Detailed design would required provisions would be made to prevent waste water, liquids, solid waste and debris from entering stormwater drains.	Design
	» The proposed development must comply with the Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Waste (DEC) http://www.epa.nsw.gov.au/resources/waste_guide.pdf .	Design

Outcome	Mitigation measure	Timing
<i>(Continued)</i>	» The waste storage areas would be developed so as to not compromise fire safety objectives by having adequate fire protection measures in accordance with Australian Standards.	Design
	» As the site would be used for goods receipt and export, waste storage areas would be designed to be separated from the goods receiver dock, particularly if more than 10 m ³ of uncompacted recyclable materials and waste is likely to be generated per day. Compaction units would be used where appropriate.	Design
	» Design of the storage area would require appropriate security access measures to prevent entry to the waste storage areas, scavenging, vandalism and illegal dumping. Measures could include fences, lockable gates, natural barriers such as ditches and embankments and surveillance systems.	Design
	» Appropriate access would be provided for servicing and for the collection of waste by a private contractor where desirable and/or necessary.	Design
	» A proper transport route to the main or communal storage area would be provided.	Design
	» If a private contractor were employed, access to the storage areas by collection trucks would implement measures for road design to have adequate strength, clearance and geometric design for truck movements on access driveways and internal roads.	Design
Minimise construction and operation waste.	» Wastewater (from cleaning the waste storage area (s) and bins) would be prevented from entering the stormwater system.	Construction, operation
	» WorkCover NSW requirements for the storage of dangerous goods would be complied with.	Construction, operation

9.2 Environmental management

9.2.1 Construction environmental management plan

A construction environmental management plan would be prepared and implemented. The construction environmental management plan would outline environmental management practices and procedures to be followed during site preparation, and construction of the proposal.

The construction environmental management plan would cover the environmental protection practices, resources and sequence of activities required to comply with relevant environmental legislation, conditions of any applicable licence, approval and permit. The plan would include:

- » A description of all activities to be undertaken on the site during site preparation, construction and commissioning of the stage of the development being undertaken;
- » Statutory approvals and other obligations that would be fulfilled during site preparation, construction and commissioning, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- » Details of how the environmental performance of the site preparation and construction works would be monitored, and what actions would be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues would be addressed:
 - Measures to monitor and manage dust emissions;
 - Measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during construction;
 - Measures to monitor and manage any contaminated soils/ materials encountered during construction and demolition;
 - Measures to monitor and manage any groundwater encountered during construction and demolition;
 - Measures to monitor and control noise emissions during construction and commissioning;
 - Measures to monitor and control air emissions during construction and commissioning, and to ensure that air emissions are both minimised and in compliance with the requirements of this consent and the Environment Protection Licence for the site;
 - Measures to manage traffic during construction; and
 - Measures to manage bushfire risk.
- » A description of the roles and responsibilities for all relevant employees involved in the construction of the development;
- » The management plans and mitigation measures listed in Table 9.1 relevant to construction and commissioning; and

- » Complaints handling procedures during construction.

9.2.2 Operation environmental management plan

A dedicated operation environmental management plan would be developed for the operation of the proposal and this would include:

- » Environmental policy, objectives and performance targets for operation;
- » Identification of all statutory and other obligations, including consents, licences, approvals and voluntary agreements;
- » Identification of the roles and responsibilities of all personnel and contractors to be employed on site;
- » Management policies, procedures and review processes to assess the implementation of environmental management practices and the environmental performance of the proposal against the objectives and targets;
- » The management plans and mitigation requirements listed in Table 9.1 relevant to operation;
- » Incorporation of environmental protection measures and instructions in all relevant Standard Operating Procedures and Emergency Response Procedures;
- » The environmental monitoring practices described in Section 9.3; and
- » Specific procedures in relation to the following, as defined by this Environmental Assessment and the conditions of consent for the proposal:
 - Traffic management;
 - Noise management;
 - Soil and water management;
 - Air quality management; and
 - Landscape management.

9.3 Monitoring

9.3.1 Air quality

Any monitoring would comply with DEC guidelines for the Sampling and Analysis for Air Pollutants in NSW. In addition, the proponent would comply with any conditions of licences or approvals, in relation to the maximum air pollutant levels.

9.3.2 Water quality

Monitoring would be undertaken to ensure that stormwater management measures are working effectively. Monitoring would rely primarily on visual inspections and sampling. Visual inspections should be undertaken of sediment basins, pits, diversion and catch drains and all other stormwater conveyance structures. A general indication of frequencies for inspections is provided in Table 9.2. An inspection log detailing the monitoring program would be kept.



Table 9.2 Monitoring program

Sample location	Collection mechanism	Frequency first six months	Frequency normal operation
Sediment Basins	Visual Inspection	Every runoff event	First runoff event of any month
Inlet Pits	Visual Inspection	Every runoff event	First runoff event of any month
Trunk Drainage Channels	Visual Inspection	Every runoff event	First runoff event of any month
Overland Flow Paths	Visual Inspection	Every runoff event	First runoff event of any month
Trafficable Areas	Visual Inspection	Every month	
Bunded areas	Visual Inspection	Every runoff event	
Other works areas, potentially contaminating stormwater	Visual Inspection and system operation testing	Every month	

Notes:

- » Runoff event must be sufficient;
- » Inspect after 24 hour retention period (ie 24 hrs after runoff event);
- » For every inspection undertaken, the date, time and ambient weather conditions would be recorded.

10. Project justification and conclusion

10.1 Achieving the objectives

Chapter 5 examined the strategic need for a facility for the large-scale transport, warehousing and storage of freight in western NSW to serve the national freight logistics industry.

Handling the future freight would increase integration of rail and road services and significantly improve intermodal transfers among road, rail, and ports in all Australian markets.

The facilities and associated infrastructure would be progressively delivered on the site based on market demand.

The 'Initial Stage' would involve development of key infrastructure to enable Terminals Australia to commence operations over a five year period. The 'Ultimate Stage' would provide ancillary infrastructure, which would permit increased throughput and provide supplementary services for freight operators and would be developed over a 10 –15 year period. Site development is dependent upon demand and growth in the freight sector and would occur progressively when market forces dictate.

10.2 Sustainability

Clause 6 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* outlines the requirements of an environmental assessment, including:

"The reasons justifying the carrying out of the development or activity in the manner proposed, having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development"

The Regulation lists the principles of Ecologically Sustainable Development as:

- a) the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
- (b) **inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
- (c) **conservation of biological diversity and ecological integrity**, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) **improved valuation, pricing and incentive mechanisms**, namely, that environmental factors should be included in the valuation of assets and services.

The following provides an assessment of the proposal against the above criteria, and takes into account the findings of this Environmental Assessment.

10.2.1 Precautionary principle

The assessment of the potential impacts of the PIT is considered to be consistent with the precautionary principle. The impact assessments undertaken have been consistent with accepted scientific and assessment methodologies. The detailed investigations undertaken have identified a range of potential impacts and as a result, mitigation measures outlined in the Draft Statement of Commitments have been developed to minimise these potential impacts.

These mitigation measures would be implemented during design, construction and operation of the PIT. No mitigation measures have been postponed as a result of lack of scientific certainty. The selected construction Contractor would be required to prepare an Environment Management Plan (EMP) prior to commencing construction. This requirement would ensure that the PIT achieves a high-level environmental performance. No mitigation measures or management mechanisms would be postponed as a result of a lack of information.

An operational EMP would be prepared would be developed for the operation of the PIT. It is recommended that environmental performance in relation to the EMP be regularly assessed through environmental audits. The audits would also assist in reviewing the adequacy of mitigation measures implemented to minimise environmental impacts associated with construction on the site and the operation of the PIT.

10.2.2 Intergenerational equity

The PIT would benefit future generations by ensuring that the PIT does not give rise to long term adverse impacts on the environment and potential impacts would be minimised by implementation of appropriate mitigation measures. This would ensure that the principle of intergenerational equity is not compromised.

The PIT would provide long term benefits to the Parkes community by providing employment opportunities for the construction and operation of the PIT as well as indirect jobs from the flow-on effects related to business travel, services and supplies. The PIT would potentially attract other industry to the region, thereby stimulating the local economy.

The PIT would serve as an important transfer and storage/distribution facility in the movement of container freight at the State and National level. It would benefit existing ports and facilities elsewhere in the logistics chain by providing alternatives to current methods of freight transfer, storage and delivery. This provides future generations with opportunities to make better use of land and infrastructure in urban and rural locations involved in the logistics chain, improve efficiency and minimise environmental and social impacts.

In addition, the site selected is largely cleared, having been previously modified through agricultural activities. Therefore a significant change to the natural form of the land is not required. Identified elements of remnant endangered ecological communities would be retained and the environment would be enhanced through planting of native species.

10.2.3 Conservation of biological diversity and ecological integrity

The biodiversity of the site has been previously altered by agricultural activities such as grazing and cropping and this has resulted in the clearance of mature vegetation from the majority of the site. This has reduced the ecological value of the study area. This facilitates a less intrusive site development and ensures that there is minimal impact on the local biological diversity and ecological integrity. Flora and fauna investigations indicated that there are unlikely to be any impacts on items of ecological significance.

The PIT would include landscaping of the site using native species. This would increase the extent of native vegetation at the site and through provision of suitable habitats has the potential to attract native fauna to the area. In addition, landscaping would assist to soften the visual appearance of the development

As the site is of low ecological importance and the proposed development would be constructed and operated to minimise potential impacts, it is in accordance with the principle of the conservation of biological diversity and ecological integrity.

10.2.4 Improved valuation and pricing of environmental resources

This Environmental Assessment has examined the environmental consequences of the PIT and identified mitigation measures for areas which have the potential to experience adverse impacts. Requirements imposed in terms of implementation of these mitigation measures would result in an economic cost to the developer (Terminals Australia). The implementation of mitigation measures would increase both the capital and operating costs of the project. This signifies that environmental resources have been given appropriate valuation.

The concept design for the PIT has been developed with an objective of minimising potential impacts on the surrounding environment. This indicates that the concept design for the PIT has been developed with an environmental objective in mind.

10.3 Consequences of not proceeding

Should the proposal not proceed, the efforts undertaken to date by stakeholders, including Parkes Shire Council and the State Government, in planning for the development of this and similar facilities would not be realised and at considerable expense. It would also reinforce the existing methods of freight handling and discourage innovative solutions by prospective future developers.

10.4 Conclusion

This Environmental Assessment has considered the potential impacts of the PIT at Parkes, west of Sydney. The Environmental Assessment has been prepared by GHD on behalf of Terminals Australia to assist the Minister for Planning in assessing the proposal.

The Environmental Assessment has been prepared in accordance with the provisions of Part 3A of the EP&A Act and the requirements of the Director-General of the Department of Planning and issues raised by other statutory agencies.



It provides an assessment of the potential environmental impacts of the proposal, and recommends management and mitigation measures to protect the environment where required.

As described earlier, concept approval is sought for the entire intermodal terminal. Subsequent applications will be submitted for individual elements of the intermodal terminal as they come to fruition and will include a detailed environmental assessment of the project design.

Overall, the proposal would:

- » Provide an intermodal terminal facility for the storage, handling and distribution of freight to key destinations throughout Australia;
- » Provide a natural incentive to convert a significant proportion of the total market from road to rail;
- » Provide a facility that would develop as an Initial Stage and to an Ultimate Stage as market forces demand;
- » Utilise existing road and rail infrastructure where possible.

To manage these potential impacts, and in some cases remove them completely, Chapter 10 outlines a number of management measures that would be undertaken. Both the construction and operation of the site would require the employment of best practice management techniques. The recommendations include the preparation of a construction management plan and operational environmental management plan to ensure that all recommendations are developed, implemented and monitored to ensure compliance with relevant legislation and conditions imposed.

No significantly adverse impacts have been identified within the Environmental Assessment or the specialist studies that accompany it. It is therefore recommended that the proposal receive approval, subject to the measures identified in the Environmental Assessment.



11. References

- AusLink, 2004. AusLink White Paper. AusLink.
<http://www.auslink.gov.au/policy/overview/background/whitepaper/3.aspx#4> [accessed 20 July, 2005]
- Australasian Railway Association, 2005.
<http://www.ara.net.au/society/society.php?id=42> [accessed 21 June, 2005]
- Department of Transport and Regional Services.
<http://www.dotars.gov.au/auslink/index.aspx> [accessed 22 June, 2005]
- GHD draft, 2005. *Parkes Intermodal Terminal: Operational and Functional Brief*.
- GHD, 2005. Parkes Intermodal Terminal Background Report.
- Institute of Engineers in Australia, 2000. Australian Rainfall and Runoff.
- Mountain Industries, 2002. *Parkes Logistics Axis: The logistics park for the new millennium*. Mountain Industries Pty Ltd.
- Parkes Shire Council, 2002. *Rationale for the Parkes Multi-Modal Transport Logistics HUB*.
- Parkes Shire Council, 2003. Parkes Transport Hub: Local Environmental Study, PSC.
- Parkes Shire Council, 2004. Parkes Shire at A Glance,
<http://www.parkes.nsw.gov.au/about.html> [Accessed 16 May, 2005]
- Parkes Shire Council, 2004. State of the Environment Report 2003 – 2004, PSC.
- Parkes Shire Council, 2006. *State of the Environment Report 2004 – 2005*,
<http://www.parkes.nsw.gov.au/files/4622/File/SOE2005.pdf>, [accessed 6 February 2006]
- RTA 2006. www.rta.nsw.gov.au. [accessed January 2006]
- Terra Consulting, 2003. *Parkes Transport Hub Environmental Audit*, Terra Consulting, Cited in PSC, 2003, *Parkes Transport Hub: Local Environmental Study*, PSC.
- Tourism NSW, 2005. *Parkes Area*, <http://parkes.visitnsw.com.au> [Accessed 16 May, 2005].