Environmental Risk Analysis – Chapter for Environmental Assessment

SIMTA

SYDNEY INTERMODAL TERMINAL ALLIANCE

Part 3A Concept Plan Application

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SIMTA

SIMTA SYDNEY INTERMODAL TERMINAL ALLIANCE

ENVIRONMENTAL RISK ANALYSIS

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EXECUTIVE SUMMARY

The Sydney Intermodal Terminal Alliance (SIMTA) is a joint venture between Stockland, Qube Logistics and QR National. The SIMTA site is located on the land parcel known as the Defence National Storage and Distribution Centre (DNSDC) site in Moorebank Avenue, Moorebank, south-west of Sydney. SIMTA proposes to develop the DNSDC site into an intermodal terminal facility and warehouse/distribution centre, which will offer container storage and warehousing solutions with direct rail access.

This report identifies and assesses the potential environmental impacts associated with the SIMTA proposal and assigns a risk ranking to each. Mitigation measures to ameliorate those risks that are proposed in the preliminary environmental assessment specialist studies are then discussed and a residual risk ranking assigned. With the application of the proposed mitigation measures no environmental aspect was ranked as 'Very High' risk and therefore unacceptable to the project.

No additional environmental risks were identified as a result of the environmental risk assessment.

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1 ENVIRONMENTAL RISK ANALYSIS

1.1 Introduction

The Sydney Intermodal Terminal Alliance (SIMTA) is a joint venture between Stockland, Qube Logistics and QR National. The SIMTA Moorebank Intermodal Terminal Facility (SIMTA proposal) is proposed to be located on the land parcel currently occupied by the Defence National Storage and Distribution Centre (DNSDC) on Moorebank Avenue, Moorebank, south-west of Sydney.

SIMTA proposes to develop the DNSDC occupied site into an intermodal terminal facility and warehouse/distribution facility, which will offer container storage and warehousing solutions with direct rail access.

The project will be undertaken as a staged development and it is intended that an overall Master Plan, for the entire site, be undertaken for the purpose of applying for Concept Plan approval under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

As part of the assessment process the potential environmental risks associated with the construction and operation of the SIMTA proposal have been reviewed.

1.1.1 SITE DESCRIPTION

The SIMTA site is located in the Liverpool Local Government Area. It is 27 kilometres west of the Sydney central business district (CBD), 16 kilometres south of the Parramatta CBD, 5 kilometres east of the M5/M7 Interchange, 2 kilometres from the main north-south rail line and future Southern Sydney Freight Line, and 0.6 kilometres from the M5 motorway.

The SIMTA site, approximately 83 hectares in area, is currently operating as a Defence storage and distribution centre. The SIMTA site is legally identified as Lot 1 in DP1048263 and zoned as General Industrial under Liverpool City Council LEP 2008. The parcels of land to the south and south-west that would be utilised for the proposed rail corridor are referred to as the rail corridor.

The proposed rail corridor covers approximately 65 hectares and adjoins the Main Southern Railway to the north. Existing land use includes vacant land, golf course, extractive industries, and a waste disposal depot. Native vegetation includes woodland, forest and wetland communities in varying condition. Georges River and Anzac Creek intersect the proposed rail corridor.

The proposed rail corridor to the south of the SIMTA site, north of the existing East Hills Rail Line are part of Lot 3001 DP1125930 and Lot 1 DP1125930. To the west of the Georges River, the Glenfield Waste Disposal site comprises several lots that are currently all used for the purposes of the waste facility.

1.2 Purpose

This report has been prepared by Hyder Consulting (Hyder) for SIMTA in order to assess the environmental risks to support the environmental assessment for Concept Plan approval under Part 3A of the *Environmental Planning and Assessment Act 1979* for the development of the SIMTA proposal and warehouse/distribution facilities. The report addresses the Director-General's Requirement (DGR) relating to environmental risks issued on the 24 December 2010, which is as follows:

Director's General's requirements	Where addressed
Not withstanding the above key assessment requirements, the EA must include an environmental risk analysis to identify potential environmental impacts associated with the project, environmental performance criteria and development standards and other mitigation measures, and any significant residual environmental impacts. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed assessment of this key environmental impact must be included.	Chapter 1

1.3 Methodology

A Preliminary Environmental Assessment (PEA) and specialist studies have been prepared on behalf of the Sydney Intermodal Terminal Alliance (SIMTA) for a request for a Part 3A Concept Plan authorisation in respect of a proposal for an intermodal terminal facility (ITF) at Moorebank Avenue, Moorebank. These reports were reviewed to identify the relevant Director-General's Requirements (DGRs) to authorise the preparation of a Concept Plan in accordance with the requirements of Section 75F of the *Environmental Planning and Assessment Act 1979* and to inform the preparation of an Environmental Assessment.

Key environmental issues identified in the DGRs were:

- Transport and access.
- Noise and vibration.
- Biodiversity.
- Hazards and risks.
- Contamination.
- Stormwater and flooding.
- Air quality.
- Heritage.
- Visual and urban design.
- Utilities.

The DGRs required that an Environmental Risk Analysis (ERA) be undertaken. The ERA identifies the following key elements:

- Potential environmental impacts associated with the project, environmental performance criteria and development standards.
- Control measures and any significant residual impacts.
- The nature and extent of environmental impacts likely to remain after the implementation of control measures.

The ERA aims to assign a qualitative environmental risk category to each issue.

Table 1 provides the risk categories used to guide the identification of an appropriate risk rating.

Table 1: Risk analysis categories and criteria for risk ranking

Likelihood	Consequence				
	1 – Not significant	2 – Minor	3 – Moderate	4 – Major	5 – Severe
A – Almost certain	Moderate	Moderate	High	Very High	Very High
B – Likely	Low	Moderate	High	Very High	Very High
C – Possible	Low	Low	Moderate	High	High
D – Improbable	Low	Low	Low	Moderate	Moderate
E – Rare	Low	Low	Low	Low	Moderate

Risk category is determined on the basis of consideration of the likelihood of an impact occurring and the consequences of the impact occurring. The criteria for evaluating likelihood and consequence are identified in Table 32 and Table 43 respectively.

Table 2: Criteria for evaluating likelihood

Level	Descriptor	Description	Frequency Of Occurrence
A	Almost Certain	Is expected to occur in most circumstances	Once per month
B	Likely	Will probably occur in most circumstances	Between once a month and once a year
C	Possible	Might occur at some time	Between once a year and once in 5 years
D	Unlikely	Could occur at some time	Between once in 5 years and once in 20 years
E	Rare	May occur in exceptional circumstances	Once in more than 20 years

Table 3: Criteria for evaluating likelihood

Level	Category	Safety	Financial	Operational
1	Not Significant	No medical control	<$250,000	< 6 hours track closure or disruption to facility operations
2	Minor	Lost time injury occurs or medical control required	≥ $250,000 but less than $2,000,000	≥ 6 hrs but less than 24 hrs track closure or disruption to facility operations
3	Moderate	Serious injury occurs	≥ $2M but less than $10M	≥ 24 hrs but less than 48 hrs track closure or disruption to facility operations
4	Major	Single fatality occurs	≥ $10M but less than $50M	≥ 2 days but less than 5 days track closure or disruption to facility operations
5	Severe	Multiple but localised fatalities occur	≥ $50M	≥ 5 days track closure or disruption to facility operations

Each potential environmental impact was initially ranked between low and very high based on the environmental impacts that could potentially result if the issue was unmitigated.

Subsequent to this initial risk ranking the environmental issues identified were assigned a second risk ranking to indicate the risk following implementation of the control measure/s.

1.4 Results

A summary of the risk analysis undertaken for each of the environmental aspects is provided in Table 4. Results present the outcome of the assessment of the perceived impacts, proposed control measures, and any residual impacts that may result.

Table 4: Environmental risk analysis

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
Transport and access	Yes	Increased traffic on proposed local road and rail routes.	**H**	• A detailed Transport and Accessibility Impact Assessment along with a Traffic Management Plan would be drafted to present likely impacts of the works and recommendations on management practices to be implemented accordingly. • Strategic and project modelling would be undertaken to inform decisions on appropriate control measures to be prepared and implemented (e.g. access and intersection upgrades where required). • An assessment of the road and rail infrastructure quality would be undertaken to determine capacity to handle increased traffic.	Yes	**H**	N/A
		Decrease in quality of local road and rail infrastructure.	**M**		None	**L**	
Noise and vibration	Yes	Increased noise and vibration levels upon adjoining receivers during construction (including nearby residential areas of Moorebank, Wattle Grove and Casula and sensitive land uses).	**H**	• A Construction Noise and Vibration Management Plan would be prepared and implemented to include the appropriate control measures to avoid, reduce and manage noise emissions and vibration.	Yes	**M**	Noise and Vibration Assessment

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		Increased noise and vibration caused by locomotive movements once SIMTA proposal is operational.	**H**	• An Operational Noise and Vibration Management Plan would be prepared and implemented to include the appropriate control measures to avoid, reduce and manage noise emissions and vibration.	There may be intermittent residual impacts during adverse weather conditions, i.e. overcast, low pressure or wind direction.	**M**	
Biodiversity	Yes	Permanent loss of threatened aquatic (including groundwater dependent) fauna and flora species habitat due to installation of infrastructure (e.g. bridge and rail link).	**M**	• Implementation of design principles for maintaining fish friendly passage. • Implementation of construction and operation management plans for maintenance of structures in riparian and aquatic zones.	Yes	**L**	Flora and Fauna Assessment
		Permanent loss of threatened fauna and flora species due to installation of infrastructure (e.g. bridge and rail link).	**M**	• The route of the proposed rail link should be designed to minimise potential impacts on the populations of *Persoonia nutans* and *Grevillea parviflora* subsp. *parviflora* in the study area. • Construction and operation activities to be undertaken in accordance with a Flora and Fauna Management Plan within CEMP and OEMP respectively.	Yes	**L**	
		Inadvertent removal and/or modification of areas containing populations, endangered ecological communities and/or critical	**VH**	• Endangered Ecological communities and known locations of threatened flora species would be avoided where possible.	Yes	**H**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		habitat (including the Cumberland Plain Woodland).		• High visibility plastic fencing is to be installed to clearly define the limits of the construction works area so as to not encroach on EEC and locations of threatened flora species.			
		Inadvertent removal and/or modification of native and threatened flora. Vegetation clearing (including riparian areas and loss and fragmentation of foraging, nesting and roosting areas.	**VH**	• Vegetation would be cleared only where required and outlined for the SIMTA proposal. • A Vegetation Management Plan (VMP) would be prepared prior to construction of the rail corridor, detailing restoration, regeneration and rehabilitation of areas of native vegetation in the vicinity of the proposed rail corridor. • The VMP would detail appropriate management for the potential habitat of threatened plant species in the study area, including monitoring during and after construction works to enable potential impacts to be minimised. Appropriate management may include fencing the habitat, signage and educating contractors of the presence of habitats, its significance and no-go zones. • The VMP should be integrated with the landscape plan for the SIMTA proposal. • A Soil and Water Management Plan would be prepared and implemented	Yes. A biodiversity offset strategy may be negotiated with Department of Premier Cabinet – Office of Environment (OEH) for unavoidable impacts.	**H**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				that would include appropriate soil erosion and sedimentation control measures for both construction and operation.			
		Loss of hollow bearing trees and fauna habitat.	**H**	• Important fauna habitat features, such as large hollow bearing trees, would be avoided where possible. • Fauna microhabitat such as logs would be removed from areas to be cleared and relocated to suitable nearby bushland areas (where practicable) in the presence of an ecologist. Strategic removal of hollow-bearing trees. • Installation of nest boxes would be considered in woodland vegetation in the rail corridor that may offer alternative nesting habitat to hollow-dependent species recorded in the study area	Yes	**M**	
		Loss of biodiversity due to bushfire.	**M**	• Hot work not to be undertaken on declared total fire ban days. • Vehicles and plant should not block fire trails. • Bushfire awareness included in staff induction and in toolbox talks pre-commencement. • Construction and operation phases would be conducted in accordance with bushfire response and emergency	Yes	**L**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				procedures and hazard reduction activities would be undertaken where endorsed by the RFS.			
		Loss of biodiversity due to changes in hydrological function of the SIMTA site, in particular the Castlereagh Swamp Woodland community.	**M**	• Design of on-site water retention to facilitate discharges to receiving waterways matching pre-construction discharges. • Installation of appropriate drainage infrastructure (e.g. sediment basins), sediment and erosion controls to manage surface waters. • Bio-retention installed in base of channels and swales proposed to capture and store stormwater. This will consist of bio-filtration layers, planting and subsoil collection and drainage.	No	**L**	
		Loss of biodiversity due to weed infestation.	**M**	• CEMP would include requirements for washdown of equipment prior to entering site to remove seed and plant material. • A weed control program is recommended as part of the conservation management of the retained vegetation. • Ongoing monitoring for identification of weed outbreaks and treatment where required. • Any imported soils or earth materials to site would be classified and certified as	Yes	**L**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				weed free prior to acceptance on site.			
		Loss of fish habitat and passage.	**M**	• Design and construction of rail crossings over Anzac Creek and Georges River to be in accordance with Fish Passage Requirements for Waterway Crossings (Fairfull and Witheridge 2003). • Installation of appropriate drainage infrastructure (e.g. sediment basins), sediment and erosion control to prevent degradation of aquatic habitat.	Yes	**L**	
Riparian	Yes	Alteration of Anzac Creek / Georges River flow regime effecting water quantity and quality.	**L**	• Development of the rail link across Anzac Creek and Georges River will comply with the required riparian corridor setbacks. Approval will be sought to undertake works within riparian corridors. • The following mitigation strategies would be adopted during construction to ameliorate impacts on riparian zones: • A Soil and Water Management Plan would be prepared and implemented that would include appropriate soil erosion and sedimentation control measures for both construction and operation. This will be defined through the preparation of a construction environmental management plan.	No	**L**	Riparian Assessment
		Loss of riparian biodiversity.	**M**		Yes	**L**	
		Removal of riparian vegetation for purposes of waterway crossings.	**VH**		Yes	**M**	
		Introduction of hazardous materials into watercourse as a result of spills.	**H**		Yes	**M**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				• Areas of disturbance would be progressively developed to reflect the need of progressive construction. Areas would be rehabilitated and stabilised as soon as possible following construction. • Potentially hazardous activities would be conducted in accordance with industry standard practice environmental protection measures and in areas isolated from stormwater drainage systems or natural watercourses. • An OEMP would be prepared and implemented to address monitoring and maintenance of riparian vegetation and water and sediment control structures.			
Bushfire	Yes	The SIMTA site has the potential to increase bushfire frequency.	**M**	• Future design stages of the SIMTA proposal will be undertaken in accordance with the management principles identified in *Planning for Bushfire Protection* (NSW RFS, 2006b). • A Bushfire Management Plan would be developed for both the construction and operational phases of the SIMTA proposal.	None	**L**	Hazards and Risks Assessment
		Increased risk of bushfire ignition from rail corridor activities.	**M**		None	**L**	
Hazards and risks (storing and handling	Yes	Pressure explosion. Fire.	**H**	• A preliminary hazard assessment would be progressivley undertaken in accordance with State Environmental	None	**L**	Hazards and Risks

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
dangerous goods on site)		Health hazard to humans.		Planning Policy No. 33 – Hazardous and Offensive Development as required as tenancy of the SIMTA site is determined. • All tenants would be required to sign onto the SIMTA site's Hazardous Material Management Plan which will adopt the Code of Practice for storage and handling of dangerous goods (WorkCover NSW, 2005) as a minimum.			Assessment
Contamination	Yes	Contaminated land. Natural soil constraint - including potential acid sulphate soils (PASS).	**M**	• A Phase 2 and 3 Environmental Site Assessment to be undertaken at five sites identified by Golders Associates Pty Ltd as potentially contaminated. • Where required, a remedial action plan would be prepared and an approval sought under State Environmental Planning Policy No. 55 – Remediation of land. • The Soil and Water Management Plan would include the appropriate measures to control associated impacts of remediation areas.	None	**L**	Hazards and Risks Assessment Phase 1 Environmental Site Assessment
Stormwater and flooding	Yes	Regional and local hydrological impacts including: • Effects on flood characteristics on and off the SIMTA site.	**M**	• Stormwater detention facilities would be designed to limit peak discharges for a range of storm durations to no greater than under existing conditions. • Water sensitive urban design measures would be incorporated in to the site	None	**L**	Stormwater and Flooding Environmental Assessment

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		• Loss of operations of the SIMTA proposal due to flooding. • Structural damage to railway line resulting to loss of serviceability/freight access to site.		design including the use of large open swales and channels and rainwater tanks.			
		Reduced surface water and stormwater quality.	**M**	• A Soil Water and Management Plan and Water Sensitive Urban Design would be drafted. The plan would confirm the engineered design solutions to minimise associated impacts upon surface and stormwater quality.	None	**L**	
		Increased erosion during construction (on and off the SIMTA site).	**H**	• An Erosion and Sediment Control Plan (ESCP) would be developed and implemented to include the appropriate control measures to minimise impacts upon water quality.	None	**L**	
Air quality	Yes	Increased air pollution (particulate matter, NO^2, CO and ozone) from the construction of the SIMTA site.	**VH**	• An Air Quality Management Plan would be prepared and implemented to include appropriate control measures during the construction and operation phases, including control of dust and other particulate emissions.	Yes	**M**	Air Quality Impact Assessment
		Increased air pollution due to increased locomotive movements during operation (particulate matter, NO^2, CO	**VH**		Yes	**M**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		and ozone).					
Greenhouse gas	Yes	Increase in greenhouse gas emissions as a result of construction and embodied emissions in materials used.	**H**	• A Greenhouse Gas Management Plan would be developed and implemented to include appropriate control measures during the construction and operation phases of the SIMTA proposal. This will include selection of materials to minimise embodied greenhouse gases.	Yes	**M**	Greenhouse Gas Assessment
		Potential net increase in direct greenhouse gas emissions as a result of operation	**L**	• The transfer of freight movements from road to rail will result in a decrease in transport related GHG emissions.	None	**L**	
Heritage	Yes	Damage and/or destruction of Aboriginal heritage items of significance.	**H**	• A management strategy for Aboriginal Heritage would be appropriate control measures during the construction and operation phases. This would include consideration of consultation requirements and process for managing any identified Aboriginal items uncovered during construction and operation.	None	**L**	Non-Indigenous Heritage Assessment Aboriginal Cultural Heritage Assessment
		Damage and/or destruction of European heritage items of significance.	**H**	• Further archaeological investigation would be undertaken in the area designated as having good archaeological potential if it is to be impacted by the SIMTA proposal. • A Statement of Heritage Impact should be prepared for the Glenfield Farm during the staged project application for	None	**L**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				the rail link. • A Heritage Management Plan would be drafted in consultation with the Australian Heritage Council and the State heritage council			
Visual and urban design	Yes	Change in visual character of the SIMTA site and rail corridor.	**M**	• A landscape management plan will be developed and implemented to reinforce the surrounding natural context and ecological qualities of the SIMTA proposal. • Along the site boundaries, a landscape treatment consistent with existing local species in the area would be applied to provide an essential scale of planting to complement the developments built forms.	None	**L**	Visual Impact Assessment
Utilities	Yes	Increase on service demand, capacity and augmentation of existing and proposed utilities and infrastructure as a result of the SIMTA proposal.	**M**	• Lead in works and network upgrade works required to supply utilities to the SIMTA proposal will be undertaken at the cost of the development.	None	**L**	Utilities Strategy Report
Waste	No	Increase in demolition waste production.	**M**	• A Waste Management Plan would be drafted to include appropriate control measures and recommendations to be implemented during the construction and operation phases of the SIMTA proposal.	None	**L**	Waste Management Strategy
		Increase in construction waste production.	**H**		Yes	**M**	
		Increase in operational waste	**M**		None	**L**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		production.					
Climate change	No	Increase frequency of flooding to buildings and infrastructure causing higher maintenance costs and reduced asset life.	**H**	• Incorporate climate change sensitivity analyses for 20 per cent increase in peak rainfall and stormwater volume into flood modelling assessment to determine system performance.	Yes	**M**	Climate Change Risk Assessment Hazards & Risks Assessment
				• Incorporate appropriate flood mitigation measures, where practical within the design to limit the risk to acceptable levels.		**L**	
		Flooding of rail infrastructure located within Anzac Creek sub-catchment causing declines in serviceability due to operational impacts.	**H**	• The impacts of climate change on system performance will be considered, to incorporate adaptive capacity measures within the design to limit the risk to acceptable levels.	None	**L**	
		Flood management structures are not designed to cope with future rainfall patterns leading to flood damage.	**H**				
		Increased risk of storm damage to structural enhancements/add-ons to buildings.	**H**	• A Soil and Water Management Plan and WSUD would be drafted to include the following control measures: • Use of appropriate materials and engineering design capable of withstanding potential impacts posed by	None	**L**	

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
				storm damage.			
		Increased bushfire frequency and intensity causing structural damage to buildings and infrastructure creating higher maintenance costs and reduced asset lifecycle.	**H**	A Bushfire Management Plan would be drafted to include the following control measures: • Incorporating appropriate strategic protection zones, including asset protection zones into design to limit bushfire risk to acceptable levels. • Control of performance of hotworks on total fire ban days during construction and operation, particularly within any defined asset protection zones.	None	**M**	
		Increased heatwave frequency resulting in rail line buckling from sudden temperature rises causing higher maintenance costs and reduced asset life	**H**	• Maintain track stability through regular maintenance, use concrete sleepers in place of wooden ones and use preventative measures in the event of heatwaves (e.g. speed restrictions, warehouse ventilation for improved heat removal).		**M**	
		Increased operating costs due to higher carbon pricing	**H**	• Consider further assessment of Marginal Abatement Cost Curves to assess commercial opportunities of reducing reliance on single energy source.		**M**	
Landuse	No	Alteration to the current landuse of the SIMTA site, rail corridor and surrounds.	**M**	Consideration of a Landuse Assessment to be drafted to include measures to control associated landuse impacts.	None	**L**	N/A

Issue	DGR key issue?	Potential impacts	Risk ranking before control measures applied	Control measures	Residual impacts	Risk ranking after control measures applied	Reference
		Rail line construction across Glenfield Waste facility would adversely affect operation of the waste facility.	**H**	Consultation will be undertaken with the owner/operator of the facility to keep them informed during design and construction.	Yes	**M**	
Community	No	Disruption to the community during construction.	**VH**	A Community Consultation and Involvement Plan would be drafted to include the following: • Maintaining communication with the community and all relevant stakeholders throughout the construction process.	Yes	**M**	Community Consultation Outcomes Report
		Community concern over impacts on air quality of queuing and idling trucks.	**H**	• SIMTA is committed to implementing a system for the management of truck arrivals and departures to reduce the likelihood of trucks queuing and idling in and around the proposed intermodal.	Yes	**M**	
		Impacts on community resulting from light shed	**M**	• SIMTA proposal will use a lighting concept designed specifically to minimise light spill and comply with Australian Standard AS4282- 1997 – Control of Obtrusive Effects of Outdoor Lighting. The lights would be shaded and downward pointing to minimise light spill. Luminaires which spread light would not be used.	Yes	**L**	

1.5 Conclusion

Key environmental impacts associated with the SIMTA proposal have been identified in the Director's General's requirements. An ERA has been completed in order to determine whether additional key environmental impacts have been identified through the environmental assessment process and whether further assessment on any such key impact is required. The ERA as presented above in Table 4, has not identified any additional key environmental impacts, therefore no additional assessment is required.