

5.0 Strategic Justification

5.1 Introduction

The proposed modification responds to changes in the commercial and strategic context of the Outer Harbour Development. It takes into account changes in market demand and the NSW State policy framework that have occurred since the original applications were lodged in 2009, and since development approval was granted in 2011. The modification also aligns with the broader strategic vision of the Federal and State governments for the efficient import and export of products through Australian ports.

5.2 Strategic Policy

To cater for increased demand, the Council of Australian Governments and the NSW Government have developed strategic trade and transport policy to best support the movement of goods in and out of our existing ports. The policies relevant to this modification include:

- *National Ports Strategy 2012* – Infrastructure Australia and National Transport Commission, 2012.
- *Draft NSW Freight and Ports Strategy* – TfNSW, 2012.
- *State Infrastructure Strategy 2012-2032* - Infrastructure NSW, 2012.
- *NSW 2021* - Department of Premier and Cabinet, 2011.
- *NSW 2021 Illawarra/South Coast Regional Action Plan* – Department of Premier and Cabinet, 2012.
- *NSW Long Term Transport Master Plan* – TfNSW, 2012.
- *Maldon-Dombarton Rail Link Feasibility Study* – Hyder and ACIL Tasman, 2011.

5.3 Strategic Role of NSW Ports

The *National Ports Strategy*, developed by Infrastructure Australia and the National Transport Commission, outlines the expectation that Australia's bulk commodity exports and metropolitan container imports will double in size every ten years. To cater for this demand, the *National Ports Strategy* identifies the need for regional bulk export ports, including Port Kembla, to significantly improve port and related landside road and rail systems to efficiently service Australia in the coming decades.

Similarly, the *Draft NSW Freight and Ports Strategy* (TfNSW, 2012) and *State Infrastructure Strategy 2012-2032* (Infrastructure NSW, 2012) provide support for the efficient movement of imported and exported products through the ports of Newcastle, Botany and Port Kembla. The *Draft NSW Freight and Ports Strategy* outlines that growth in container trade will be primarily accommodated through planned expansion of container terminals at Port Botany (TfNSW, 2012). However, it is still expected that Port Kembla would play an important role in offsetting the container capacity of Port Botany towards 2031 (TfNSW, 2012).

5.4 Growth in Bulk Commodity Trade

Currently Port Kembla is a major gateway for the import and export of various bulk commodities, and this is likely to remain as the core business of the Outer Harbour in the next 20 years. Steelmaking raw material imports of approximately 4 Mtpa, and coal and grain exports at around 14.5 and 3 Mtpa respectively, currently account for the majority of bulk trades. Together, bulk materials account for nearly 70 percent of total port trade.

The increased demand for bulk commodities foreshadowed over the next 10 to 15 years is a result of the discovery of significant new large mineral deposits in central NSW such as iron ore and bauxite, with accessibility for export of these materials easily provided through the regional ports of Port Kembla and the Port of Newcastle. The origins of bulk commodities that are likely to increase in the future and are driving the need for the modification are outlined in **Table 5-1** (PKPC, 2013).

Table 5-1 Potential future export commodities and origins

Commodity	Origin
Black coal	Southern, western and north western coal fields
Iron ore	Western NSW, Lake Cargelligo and Wagga Wagga
Bauxite	Northern NSW, south eastern and central western NSW

Source: PKPC, 2013 and Department of Primary Industries, 2011.

Unlike the trade commodities identified in the previous Environmental Assessment, such as sand and woodchip, these trades (iron ore and bauxite) depend on high volume transport, storage, loading and shipping capacity. Existing port infrastructure does not possess the capacity or capability to handle such commodities.

This shift in the identified role of the Port has recently been reflected through the significant interest expressed to PKOPL by prospective customers, with regard to the movement of larger volumes of bulk cargo through the port. Advanced planning of port facilities in the Outer Harbour to handle this growth in bulk trade, and to provide suitable flexibility in approvals is essential, to ensure the Port remains competitive and can service domestic and international markets efficiently.

5.5 Freight Rail Infrastructure

The *State Infrastructure Strategy 2012-2032* (Infrastructure NSW), State plan *NSW 2021* (Department of Premier and Cabinet, 2011) and the *NSW Long Term Transport Master Plan* (TfNSW, 2012) focus on the preferred movement of freight by rail rather than road in NSW. Advantages of moving commodities by rail rather than road include the subsequent reduction in road traffic and decreasing current infrastructure pressures on the road network (TfNSW, 2012). In addition, the movement of high tonnage bulk exports by rail is more economically viable than by other means. The modification would be consistent with this policy objective, with the majority of bulk goods to be transferred to the Port by rail.

The policies identify the need for the improvement of freight rail infrastructure, identifying required investment for the Illawarra region to service Port Kembla. Recognising that movement of freight to and from the port is predicated on an effective and well-connected rail system, a number of investigations have progressed into increasing freight capacity on the regional rail network post Concept and Major Project approval.

The *Maldon-Dombarton Rail Link Feasibility Study* (Hyder and ACIL Tasman, 2011) released in September 2011 identifies the feasibility of the completion the Maldon-Dombarton freight corridor in light of potential increases in freight and to offset road and rail congestion. Support for the Maldon-Dombarton line is evident in the *NSW 2021 Illawarra/South Coast Regional Action Plan* (Department of Premier and Cabinet, 2012), with prioritisation of better coordination, greater efficiency and improved performance of freight movement to and from Port Kembla.

In its submission to the *Maldon-Dombarton Rail Link Feasibility Study*, the ARTC conducted an initial analysis of the capacity of its existing line between Moss Vale and Unanderra, that could potentially accommodate any overflow volume that is unable to secure path capacity on the RailCorp Illawarra line, as well as growth in volume that would choose the Moss Vale to Unanderra line as its natural route to the Port. Based on this investigation, the *Maldon-Dombarton Rail Link Feasibility Study* concluded that the Moss Vale to Unanderra line is underutilised and has spare capacity (Infrastructure NSW, 2012; Hyder and ACIL Tasman, 2011). The Moss Vale to Unanderra line could be upgraded to handle more frequent and longer trains for well below the cost of constructing a Maldon-Dombarton line. Further information regarding rail infrastructure capacity is contained in **Chapter 9.0** of this Environmental Assessment.

5.6 Socio-economic Benefits

The importance of Port Kembla to the local region is emphasised in the *NSW 2021 - Illawarra/South Coast Regional Action Plan*. By increasing bulk throughput, the modification would provide further employment opportunities, supporting the goal of the region to 'revitalise the economy by attracting new industry, supporting business and creating jobs' (Department of Premier and Cabinet, 10, 2012). The regional action plan also identifies the Outer Harbour Development as 'an important project for the region that will help build a strong local economy into the future' (Department of Premier and Cabinet, 11, 2012). The modification would provide indirect economic benefits for the broader Wollongong region, in addition to that provided by the development as originally approved. This is discussed further in **Section 10.9**.

5.7 Conclusion

The proposed modification would be economically beneficial to NSW and the Illawarra region, by maximising the efficiency of port-based and regional transportation infrastructure, increasing job generation and facilitating import and export growth. Increasing bulk trade at Port Kembla reflects the broader strategic vision of the State regarding the movement of container and bulk commodities through its three major ports. Since the original approval was issued, PKOPL has received significant market interest from customers interested in moving large volumes of bulk cargos through the port. At the same time, the outcomes of the capacity analysis of the Moss Vale to Unanderra line to handle additional freight movements gives confidence to investor interest regarding increasing bulk throughput at the Port. As a result, PKOPL proposes this modification as a feasible option to satisfy prospective demand, whilst retaining the flexibility to meet a changing market.

This page has been left blank intentionally.

6.0 Statutory Planning

6.1 Commonwealth Legislation

6.1.1 Environment Protection and Biodiversity Conservation Act 1999

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) requires the approval of the Commonwealth Minister for the Environment, Heritage and the Arts for actions that may have a significant impact on matters of National Environmental Significance (NES).

The EPBC Act lists seven matters of NES which must be addressed when assessing the impacts of a proposal, including:

- Nationally threatened species and ecological communities.
- Australia's World Heritage properties.
- Ramsar wetlands of international importance.
- Migratory species listed under the EPBC Act (species protected under international agreements).
- Commonwealth marine areas.
- Nuclear actions, including uranium mining.
- National heritage.

The previous Environmental Assessment did not identify any significant impacts to matters of NES. It concluded that potential foraging habitat for the Green and Golden Bell Frog, which is listed as Vulnerable under the EPBC Act, would be removed as a result of works in the South Yard. While the modification has the potential to affect a larger area of potential Green and Golden Bell Frog habitat, it is not anticipated to significantly increase the impact, subject to the implementation of recommended mitigation strategies. The assessment undertaken for this modification has concluded that the modification to the Concept Plan and Major Project is unlikely to have a significant impact on other matters of NES. Referral of the project to the Department of Sustainability, Environment, Water, Populations and Communities, in accordance with the EPBC Act would therefore not be required.

6.2 State Legislation

6.2.1 Environmental Planning and Assessment Act 1979

The Outer Harbour Development was declared to be a major project and Concept Plan and Major Project approval was granted for the development under Part 3A of the EP&A Act in 2011.

On 1 October 2011, Part 3A of the EP&A Act was repealed. At the same time, savings and transitional arrangements were put in place for projects that are classified as 'transitional Part 3A projects'. This project is defined as a transitional Part 3A project as it was approved prior to the repeal of that Part 3A of the EP&A Act. As such, any modification to the approval is to be considered under Section 75W of the EP&A Act. Under Section 75W of the EP&A Act, a proponent may request the Minister to modify the project approval if the project, as modified, would not be consistent with the project as approved.

As the proposed modifications would alter some elements of the existing approval, PKOPL requests that the Minister modify the Concept Plan and Major Project approval as outlined in this assessment. It should be noted that PKOPL has already lodged a request and received confirmation from P&I regarding the assessment of the modification pursuant to Section 75W of the EP&A Act. After consultation between PKOPL and P&I on 10 December 2012, DGRs were issued for the modification under Section 75W(3) of the EP&A Act.

Under Clause 8F of the *Environmental Planning and Assessment Regulation 2000*, landowners consent is not required if the modification application is made by a public authority. PKOPL has notified the owners of the land not under the control of PKOPL, as described in **Section 2.2.2**, by way of notice to the landowners prior to the lodgement of this environmental assessment.

6.2.2 Other State Legislation and Authorisations

Section 75U and Section 75V of the EP&A Act

Under Section 75U of the EP&A Act (historical version for the period between 28 February 2011 and 2 March 2011), certain authorisations (such as permits or approvals) under other pieces of NSW legislation are not required for an approved Part 3A project. Conversely, Section 75V of the EP&A Act cites legislation that must be applied consistently for Part 3A projects. An authorisation cited in this section cannot be refused if it is necessary for carrying out an approved project.

The authorisations under Sections 75U and 75V of the EP&A Act and their relevance to the proposed modification are outlined in **Table 6-1** and **Table 6-2**, respectively. Other legislation applicable to the modification is also outlined in this table.

Table 6-1 Relevance of other legislation to the proposed modification listed under Section 75U of the EP&A Act

Legislation	Relevant to Modification (if not for the application of Part 3A of the EP&A Act)		Comment
	Concept Plan	Major Project	
<i>Coastal Protection Act 1979 (Part 3)</i>	Yes	Yes	Potential impacts associated with dredging and reclamation as they relate to the proposed modification are considered in Chapters 14.0, 15.0 and 16.0 .
<i>Fisheries Management Act 1994</i> (permit under Sections 201, 205 and 219 of the Act)	Yes	Yes	Relevant approvals under Sections 201, 205 and 219 of the <i>Fisheries Management Act 1994</i> are still not relevant with the addition of the proposed modification. Potential impacts associated with dredging, reclamation and aquatic ecology as they relate to the proposed modification are considered in Chapters 15.0, 16.0 and 17.0 . Nonetheless, NSW Fisheries would be notified of the dredging and reclamation activities by PKOPL.
<i>Heritage Act 1977</i>	No	No	No items of heritage significance listed on the State Heritage Register would be impacted by the proposed modification.
<i>National Parks and Wildlife Act 1974</i>	No	No	All previously recorded Aboriginal sites are located well outside the impact area, and there is considered to be little or no likelihood that any intact or undisturbed subsurface Aboriginal heritage material remains in situ within the study area and would be impacted by the modification.
<i>Native Vegetation Act 2003</i>	No	No	The application of the <i>Native Vegetation Act 2003</i> excludes land zoned “industrial” or “business” under an environmental planning instrument, or where the substantial character of the zone would not be land to which a property vegetation plan would apply. Further, any additional vegetation that would be cleared as a result of the modification is highly disturbed and weed infested.
<i>Rural Fires Act 1997</i>	No	No	Not applicable to the modification.

Legislation	Relevant to Modification (if not for the application of Part 3A of the EP&A Act)		Comment
<i>Water Management Act 2000</i>	Yes	Yes	The changes to Salty Creek could be defined as a controlled activity on waterfront land under the <i>Water Management Act 2000</i> . However, statutory bodies and State-owned corporations have an exemption to this type of approval, regardless of the application of Part 3A of the EP&A Act. Matters relating to the Salty Creek modifications are considered in Chapters 14.0 and 17.0 . There is also potential for groundwater to be intercepted during the construction of the bulk unloaders, which may require dewatering during construction. This is considered further in Chapter 13.0 .

Table 6-2 Relevance of other legislation to the proposed modification listed under Section 75V of the EP&A Act

Legislation	Relevant to Modification		Comment
	Concept Plan	Major Project	
<i>Fisheries Management Act 1994</i> (aquaculture permit under Section 144 of the Act)	No	No	This approval relates to aquaculture permit under the <i>Fisheries Management Act 1994</i> , which is not relevant to the Outer Harbour Development and modification. As noted in Table 3, there are other aspects of the <i>Fisheries Management Act 1994</i> that are relevant but do not apply to Part 3A projects.
<i>Mine Subsidence Compensation Act</i>	No	No	Not relevant to the modification.
<i>Mining Act 1992</i>	No	No	Not relevant to the modification.
<i>Petroleum (Onshore) Act 1991</i>	No	No	Not relevant to the modification.
<i>Protection of the Environment Operations Act 1997</i>	Yes	Yes	Modification would not alter the requirement for Environment Protection Licences (EPL). Scheduled activities that triggered the requirement of an EPL included: <ul style="list-style-type: none"> - Crushing, grinding or separating. - Land-based and water-based extractive activities. - Shipping in bulk.
<i>Roads Act 1993</i>	Yes	Yes	The following elements of the proposed modification would require consent from the roads authority: <ul style="list-style-type: none"> - Upgrade of the rail bridge over Old Port Road. - Disturbance of the surface of Old Port Road during rail infrastructure works at the at-grade level crossing. - Connections of the new link road with public roads, such as Christy Drive.

Legislation	Relevant to Modification		Comment
<i>Pipelines Act 1967</i>	No	No	No pipelines as defined by the <i>Pipelines Act 1967</i> would be required for the modification. As such, approvals under that Act are not required.

Contaminated Lands Management Act 1997

Contaminated groundwater has been found in a new area to be impacted by the proposed modification to the rail infrastructure corridor. This contamination has been reported to the NSW Environment Protection Authority (EPA) as per the requirements of the *Contaminated Lands Management Act 1997*. The procedure for addressing the risk associated with the contaminated groundwater would be determined through consultation between EPA and PKOPL.

6.3 Environmental Planning Instruments

The principal environmental planning instruments that apply to the site are:

- *State Environmental Planning Policy (Port Botany and Port Kembla) 2013*
- *State Environmental Planning Policy No 33 – Hazardous and Offensive Development*
- *State Environmental Planning Policy No 71 – Coastal Protection*

The *Wollongong Local Environmental Plan 2009* does not apply to the site, as explained in **Section 6.3.4**.

6.3.1 State Environmental Planning Policy (Port Botany and Port Kembla) 2013

Overview

The port of Port Kembla and the Outer Harbour is subject to the provisions of *State Environmental Planning Policy (Port Botany and Port Kembla) 2013* (Ports SEPP). The Ports SEPP was introduced by the State Government in May 2013 to reflect the fact that Port Botany and Port Kembla were transitioning to a private long-term leasehold operation. It replaces the former State Significant Site listing for Port Botany and Port Kembla applied under the *State Environmental Planning Policy (Major Development) 2005*.

The aims of the Ports SEPP are :

- *To provide a consistent planning regime for the development and delivery of infrastructure on land in Port Botany and Port Kembla*
- *To allow for the efficient development, re-development and protection of land at Port Botany and Port Kembla for port purposes*
- *To identify certain development within the Lease Area as exempt or complying development*
- *To specify matters to be considered in determining whether to grant consent to development adjacent to development for port purposes*
- *To provide for development at Port Botany that does not, by its nature or scale, constitute an actual or potential obstruction or hazard to aircraft*
- *To identify certain development as State significant development or State significant infrastructure*
- *To ensure that land around the Lease Area is maintained for port-related and industrial uses, including heavy industry on land around Port Kembla.*

Permissibility

The modification will occur within the Port Kembla Lease Area as shown under the Ports SEPP. The Lease Area includes the waters and foreshore areas of the Outer Harbour and the Outer Harbour Rail Loop.

Clause 18 of the Ports SEPP states that development may be carried out for certain purposes (including *capital dredging* and *port facilities* with a capital investment value (CIV) of more than \$100 million) without development consent on land within the IN3 Heavy Industrial and SP1 Special Activities Zones. However, this only applies to development carried out by or on behalf of a public authority (which includes the Port Operator).

Capital dredging means dredging that is carried out for the purpose of:

- a) Constructing a new navigational channel, or
- b) Re-opening a disused navigational channel, or
- c) Deepening or widening an existing navigational channel (other than for maintenance purposes), for berthing or navigation purposes

Port facilities means facilities in the Lease Area used in connection with the carrying of freight and persons by water from one port to another for business or commercial purposes, and includes any of the following:

- a) Facilities for the embarkation or disembarkation of passengers onto or from any vessels, including public ferry wharves,
- b) Facilities for the loading or unloading of freight onto or from vessels and freight receipt, processing, land transport and storage facilities,
- c) Wharves for commercial fishing operations,
- d) Refuelling, launching, berthing, mooring, storage or maintenance facilities for any vehicle,
- e) Sea walls or training walls,
- f) Administration and port operations buildings and facilities,
- g) Communication, security and safety facilities,
- h) Utilities and services, road and rail infrastructure, pipelines and carparks.

The modification is consistent with the definition of *capital dredging* and *port facilities* with a CIV of more than \$100 million as contained in the Ports SEPP and the development is to be carried out by the Port Operator. On this basis development consent is not required.

As the proposed development is to be assessed as a modification of the existing Concept Plan and Major Project approvals under Section 75W of the EP&A Act, the provisions in Clause 28 of the Ports SEPP relating to State Significant Infrastructure are not applicable.

Consistency with Zone Objectives

Under the Ports SEPP, the modification is subject to the provisions of SP1 Special Activities Zone and the IN3 Heavy Industrial Zone.

The waters of the Outer Harbour and most parts of the foreshore are zoned SP1 Special Activities. Land extending south from Foreshore Road and west from Old Port Rd to the edge of the residential development and the suburbs of Port Kembla, Warrawong and Cringila, is zoned IN3 Heavy Industrial.

The modification complies with the objectives of the SP1 and IN3 zones as shown in **Table 6-3**.

Table 6-3 Consistency of the proposed modification with zone objectives under the Port Botany and Port Kembla SEPP

Zone Objective	Consistency
SP1 – Special Activities	
a) to provide for special land uses that are not provided for in other zones	The proposed modification requires the use of additional land for rail and supporting infrastructure to enable the efficient transport of bulk volumes through Port Kembla. The modification would also change the operational land use for the southern portion of the multi-purpose terminal. Due to the unique nature of the port environment, these land uses would not be provided for in other zones.
b) to provide for sites with special natural characteristics that are not provided for in other zones	The modification would not result in changes to any special natural characteristics that are not provided for in other zones. In addition, the modification and Outer Harbour Development would take place in a heavily modified port and industrial environment which does not boast any special natural characteristics.

Zone Objective	Consistency
c) to facilitate development that is in keeping with the special characteristics of the site or its existing or intended special use, and that minimises any adverse impacts on surrounding land	The modification would enable the Port to keep with the special characteristics of the facilities by improving the efficiency of the services provided by the port. The design and mitigation measures provided in the environmental assessment seek to minimise adverse impacts on surrounding land.
d) to maximise the use of waterfront areas to accommodate port facilities and industrial, maritime industrial and bulk storage premises that benefit from being located close to port facilities	The modification would enable the maximisation of waterfront areas with the addition of large storage sheds on the multi-purpose terminal for storage of bulk products, and altered berth design to accommodate larger vessels, thus supporting greater efficiency at the port.
e) to enable the efficient movement and operation of commercial shipping, and to provide for the efficient handling and distribution of freight from port areas through the provision of transport infrastructure	Increased dredging and altered berth design would enable the efficient movement and operation of larger vessels of Cape and Super Post-Panamax size. The improved rail upgrades that would occur as part of the modification would enable increased train movements to support larger bulk cargo volumes as part of the Concept Plan, providing greater efficiency. A covered conveyer system leading to a storage shed would be designed to maximise distributional efficiencies from the unloading point to berthed vessels.
f) To provide for port related facilities and development that support the operations of Port Botany and Port Kembla	The modification would provide altered dredging, and reclamation footprints, altered berth and terminal design, and altered rail infrastructure to support the anticipated growth in bulk cargo operations at Port Kembla. In particular the modification provides for operation of larger vessels and increased train movements to service an increase in bulk cargo volumes.
g) to facilitate development that by its nature or scale requires separation from residential areas and other sensitive land uses	The modification would be expanding the Outer Harbour Development, which due to its nature as a major freight handling facility, requires separation from residential areas and other sensitive land uses. The existing industrial developments adjacent to the Outer Harbour Development provide separation and shielding to nearby residential areas. Upgrades to the rail infrastructure in the South Yard are the closest activity to residential areas, with minimal separation. As these activities would be in an existing rail corridor and surrounded by existing developments, it is not feasible to afford greater separation to residential areas. The potential amenity impacts of the additional rail movements are discussed in Section 9.4 .
h) to encourage employment opportunities.	The increase in bulk throughput would directly contribute to the generation of employment opportunities in both the construction and operational phases of the project.

Zone Objective	Consistency
IN3 – Heavy Industrial	
a) to provide suitable areas for those industries that need to be separated from other land uses	The modification would not impact on the separation of this industry from other land uses. Refer to item (g) of SP1 above.
b) to encourage employment opportunities,	Refer to item (h) of SP1 above.
c) to minimise any adverse effect of heavy industries on other land uses	The modification does not involve heavy industry. However, mitigation measures have been recommended to minimise impacts on other land uses, where appropriate.
d) to provide transport infrastructure and intermodal facilities	The modification would provide improved transport infrastructure and intermodal facilities between train, truck and ships.
e) to allow a diversity of activities that will not significantly detract from the operation of existing or proposed industries.	The modification would not impact on the diversity of activities currently undertaken at Port Kembla. The Outer Harbour Development would result in indirect employment opportunities.

Consequential Modifications to the Concept Plan Approval

It is noted that the existing Concept Plan approval for the Outer Harbour Development identifies the assessment pathways for future development under the Concept Plan. This relies, in part, on the categorisation of the development assessment pathway (for example, exempt development, or development permissible with or without consent) and capital investment thresholds as specified under SEPPs that are no longer applicable as they have been superseded by the introduction in May 2013 of the Ports SEPP.

Therefore, as part of this modification it is requested that the Minister (or his delegate) consider amendments to the determinations under Section 75P(1) of the EP&A Act for the Concept Plan, to ensure consistency between the Concept Plan approval and current NSW Government policy.

6.3.2 State Environmental Planning Policy No 33 – Hazardous and Offensive Development

The aims of *State Environmental Planning Policy No 33 – Hazardous and Offensive Development* include the amendment of definitions of hazardous and offensive industries used in environmental planning instruments and to require development consent for hazardous and offensive development.

The Dangerous Goods to be stored on site has not changed as a result of the modification. As such, the findings of the original Preliminary Hazard Analysis (PHA) remain unchanged. The PHA concluded that the specified risk criteria for the Major Project and the Concept Plan would not be exceeded, and that the Outer Harbour Development could be categorised as 'potentially hazardous'. As such, the modification would also be permissible within the current land zoning, provided mitigation measures outlined in the original PHA continue to be implemented.

6.3.3 State Environmental Planning Policy No 71 – Coastal Protection

State Environmental Planning Policy No 71 – Coastal Protection (SEPP 71) aims to ensure there is a consistent and strategic approach to coastal planning and management. Relevant matters for consideration are listed in Clause 8 of SEPP 71. The applicability of SEPP 71 and matters for consideration are addressed in the original Environmental Assessment for the Outer Harbour Development. **Table 6-4** below outlines only those matters of consideration that relate to the modification.

Table 6-4 SEPP 71 matters for consideration

Item	Clause 8 Matters for Consideration	Consistency
<i>Aims of this Policy [SEPP 71] set out in clause 2:</i>		
a)	<i>To protect and preserve Aboriginal cultural heritage, and Aboriginal places, values, customs, beliefs and traditional knowledge.</i>	<p>The original Environmental Assessment uncovered no evidence that recorded or unrecorded Aboriginal sites would be impacted by the proposed development.</p> <p>All previously recorded Aboriginal sites are located well outside the impact area, and there is considered to be little or no likelihood that any intact or undisturbed subsurface Aboriginal heritage material remains in situ within the study area and would be impacted by the modification. This is discussed further in Section 21.3 of this Environmental Assessment.</p>
e)	<i>To ensure that the visual amenity of the coast is protected.</i>	The modification would contribute to minor changes in the visual impact of the development as approved, with the introduction of storage sheds and larger vessels accessing the Port. This is discussed further in Chapter 20.0
h)	<i>To protect and preserve the marine environment of New South Wales.</i>	The potential ecological impacts of the proposed modification are discussed in detail in Chapter 17.0 .
j)	<i>To manage the coastal zone in accordance with the principles of ecologically sustainable development (within the meaning of section 6(2) of the Protection of the Environment Administrations Act 1991.</i>	Sustainability issues have been assessed in Section 21.4 .
k)	<i>To ensure that the type, bulk, scale and size of development is appropriate for the location and protects and improves the natural scenic quality of the surrounding area.</i>	The proposed modification would have minimal change in visual impacts on this section of the coast which is visually dominated by the surrounding port and industrial activities (existing and proposed). The potential visual impacts of the modification are low depending on the location of the view as discussed in Chapter 20.0 .
l)	<i>To encourage a strategic approach to coastal management.</i>	The strategic context of the modification is discussed in Chapter 5.0 . The Outer Harbour Development is within an existing port area, with restricted public access to active port areas and highly modified foreshore areas. There would be no new public access opportunities as a result of the Outer Harbour Development. This would not change as a result of the modification.
c.	<i>The suitability of a development given its type, location and design and its relationship with the surrounding environment.</i>	Chapter 2.0 discusses the relationship of the modification with surrounding land uses. The modification would not alter the nature of the development and remains entirely suitable for the zone and port/industrial environment. The Outer Harbour Development is within an existing port area and is consistent with the context of the surrounding environment. The visual impacts of the modification are discussed in Chapter 20.0 .

Item	Clause 8 Matters for Consideration	Consistency
i.	<i>The likely impact of coastal processes and coastal hazards on development and any likely impacts of development on coastal processes and coastal hazards.</i>	The impact of the proposed modification on coastal processes and coastal hazards is addressed in Chapter 19.0 . The changes to the development as a result of the modified reclamation and dredging footprint are not anticipated to result in any significant variation to the outcomes of the previous Environmental Assessment in terms of infragravity (long) wave, and gravity (ocean swell) waves, or the flushing of the Inner and Outer Harbour. Relevant studies would be undertaken during each project application and the detailed design of each stage to meet the requirements of this condition

6.3.4 Wollongong Local Environmental Plan 2009

The *Wollongong Local Environmental Plan 2009* (LEP) does not apply to the elements of the modification by virtue of the relevant provisions of the Ports SEPP. Subsequently, the modification is also not subject to the provisions of any Development Control Plans related to the LEP.

This page has been left blank intentionally.

7.0 Consultation

This chapter provides an overview of the consultation activities that have been carried out during the preparation of this assessment for the proposed modification. It also addresses the DGRs for consultation which are shown below.

7.1 Director General's Requirements

This assessment has been prepared in accordance with the DGRs issued by P&I in accordance with Section 75W(3) of the EP&A Act. A full copy of the DGRs for the EIS is provided in **Appendix A**.

The matters raised by the DGRs for consideration in the assessment, relating to consultation, are as follows:

You should undertake an appropriate level of consultation with relevant parties during preparation of the assessment, including (but not limited to):

- local, State or Commonwealth government authorities such as:
 - NSW Environment Protection Authority,
 - Department of Primary Industries (Fisheries),
 - Roads and Maritime Services,
 - Transport for NSW,
 - NSW Office of Environment and Heritage,
 - Australian Rail Track Corporation, and
 - Wollongong City Council;
- service and infrastructure providers;
- specialist interest groups; and
- the public, including adjoining and affected landowners .

The assessment must describe the consultation process, document consultation undertaken and identify the issues raised (including where these have been addressed in the assessment). Where amendments have not been made to address an issue, an explanation should be provided.

7.2 Consultation with Relevant Authorities

As part of the DGRs, P&I identified that an appropriate level of consultation with relevant authorities and service providers would be required during the preparation of the assessment for the proposed modification. In addition to this process, consultation was undertaken with relevant authorities during the preparation of the EIS to further discuss pertinent issues and the approach of the environmental impact assessment.

Consultation was undertaken with the following authorities or corporations to discuss the scope of the modification, seek feedback on the issues and the methodology for the assessment, and an outline of the preliminary findings of the assessment:

- The Department of Planning and Infrastructure
- Roads and Maritime Services
- Transport for NSW
- Australian Rail Track Corporation
- RailCorp
- NSW Environment Protection Authority.

The following statutory authorities were consulted more generally in relation to the proposed modification and the environmental assessment:

- Wollongong City Council (Council)
- NSW Office of Environment and Heritage
- Department of Primary Industries (Fisheries) (NSW Fisheries)
- Endeavour Energy
- Sydney Water
- Jemena.

The outcome of consultation is outlined in **Table 7-1** below.

Table 7-1 Consultation with authorities

Authority	Date of Consultation	Items Discussed	Outcome
Planning and Infrastructure (P&I)	10 December 2012	<ul style="list-style-type: none"> - The proposed modification. - The applicable assessment pathway under the EP&A Act. - The range of environmental issues associated with the modification. 	P&I advised that a modification pathway under section 75W of the EP&A Act would apply, with the issue of DGRs following PKPC's submission of a preliminary environmental assessment for the modification.
	16 April 2013	<ul style="list-style-type: none"> - An update on the progress in the environmental assessment. - The impact assessment for rail and road traffic impacts. - The lodgement process, including fees and landowners consent. 	<p>Confirmed that qualitative assessment of impacts is suitable when the impacts are similar or lesser than that identified in the previous Environmental Assessment.</p> <p>The environmental assessment is to provide an understanding on the capacity constraints at the Coniston-Unanderra junction and any plans to upgrade this junction. The assessment should also describe how longer bulk trains would be catered for at the Port.</p> <p>P&I would need sufficient level of certainty on the rail network capacity to ensure there is no later move back to road transport.</p>
	12 August 2013	<ul style="list-style-type: none"> - P&I Adequacy Review comments on the draft EA, in particular issues relating to: <ul style="list-style-type: none"> • options for treatment of the rail level crossing on Old Port Road; • assessment of rail noise; • water quality impacts associated with the increased volume of bulk cargo to be handled at the multi-purpose terminal; and • further detail in relation to previous soil and groundwater contamination investigations. 	The EA has been updated to address all of these issues with the exception of rail noise on the rail network beyond the Outer Harbour lands. It was agreed that a rail noise assessment of increased rail movements on the broader rail network was not necessary.

Authority	Date of Consultation	Items Discussed	Outcome
Roads and Maritime Services (RMS)	8 March 2013	<ul style="list-style-type: none">- The scope of the approved Outer Harbour Development and the proposed modification.- Options available for resolving conflicts with road and rail at the level crossing on Old Port Road, including temporary and permanent closures.- The advantages and disadvantages with each option.- Potential changes to construction vehicles required for the importation of reclamation fill.	<p>An Origin-Destination survey has been prepared to ascertain the potential impacts of any temporary or permanent closure of Old Port Road, to enable RMS to provide informed advice on which option(s) it may support.</p> <p>RMS provided comment on the methodology for the Origin-Destination survey and the surveys were conducted on 19 March 2013 and 22 March 2013.</p> <p>RMS confirmed that a detailed assessment of construction traffic would not be required for the purposes of the assessment.</p>

Authority	Date of Consultation	Items Discussed	Outcome
	17 April 2013	<ul style="list-style-type: none"> - The results of the Origin-Destination surveys. - Preliminary findings of the potential impacts of a temporary closure of Old Port Road. 	<p>RMS requested that the results of the Origin-Destination survey are applied to an intersection assessment of two key intersections on Five Islands Road, as well as information on the likely number of vehicles that would be diverted when the crossing is closed.</p> <p>This was supplied to RMS on 19 April 2013, with the preliminary treatment options for Old Port Road rail level crossing.</p> <p>In response, RMS provided a written response noting the below.</p> <p><i>RMS strongly supports the use of rail to transport the increase in cargo by approximately 16 trains per day at ultimate development to/from the port as part of the Outer Harbour Development. RMS strongly supports economic development in the region and an increased modal shift to rail.</i></p> <p><i>RMS recognises the subject proposal will have a significant impact on the rail level crossing on Old Port Road by each train blocking the crossing for approximately 40 minutes while unloading.</i></p> <p><i>RMS notes that the proponent is considering different options to manage the impacts of the proposal in the short term, medium term and long term.</i></p> <p><i>RMS is open to the investigation of different options for a short term treatment and a medium term treatment, provided there is an agreed threshold (e.g. number of trains per day) to trigger a requirement of the higher treatment at an appropriate time.</i></p> <p><i>In the short term, RMS is open to investigation of the closure of Old Port Road between 6 pm and 6 am. The investigation would need to consider all likely impacts of the proposal including:</i></p> <ul style="list-style-type: none"> - <i>Accessment for all vehicles (including oversized and overmass) between the rail overbridge on Old Port Road. The rail overbridge has a low clearance of 4.5 metres and vehicles with a height above 4.5 metres rely on the southern end of Old Port Road and the use of the rail level crossing to access properties between the rail overbridge and the rail level crossing</i>

Authority	Date of Consultation	Items Discussed	Outcome
		Cont...	<p>- <i>The impacts of redistributed traffic including the suitability of Downie's Bridge for two way movements (including heavy vehicles), appropriate junction treatments on local and State Classified Roads; and turn around facilities, detour signage and variable message signage providing notification of any road closure.</i></p> <p><i>RMS is willing to consider closure of the rail level crossing for a portion of the day as a short term treatment subject to the above issues being addressed to RMS satisfaction.</i></p> <p><i>In the medium term, access for all vehicles (including oversized and overmass) needs to be maintained to all developments in the precinct, whether it be by a grade separated bridge or an alternative road connection.</i></p> <p><i>RMS considers that the proponent will need to carry out extensive consultation with all relevant stakeholders (particularly those business owners directly impacted by the changed use of the rail level crossing, regarding any proposed treatments, as part of the DA Modification Application process.</i></p> <p><i>RMS will reconsider the proposal once the issues are addressed to its satisfaction.</i></p>

Authority	Date of Consultation	Items Discussed	Outcome
Transport for NSW (TfNSW), Railcorp and Australian Rail Track Corporation (ARTC)	13 March 2013	<ul style="list-style-type: none"> - The scope of the approved Outer Harbour Development and the proposed modification. - The increased rail movements that would occur as a result of the proposed modification. - The available capacity on the existing rail network and known constraints, with specific discussion on the Moss Vale-Unanderra Line, the Coniston-Unanderra Line and the proposed Maldon-Dombarton Line - Additional capacity that could be created by various rail upgrade options. - Discussion and confirmation of the assumptions applied in the rail scenarios presented at the meeting. 	<p>It was agreed that the assumptions used in the rail assessment, largely informed by the information published in the <i>Maldon-Dombarton Rail Line Feasibility Study – Final Report</i> (ACIL Tasman Pty Ltd, 2011) (the Feasibility Study), would be supplied to the three authorities for comment. Further information was also sought from Railcorp concerning any potential constraints along the Coniston-Unanderra Line, which was not documented in the Feasibility Study.</p> <p>The assumptions were provided on 22 March 2013.</p> <p>TfNSW also requested information on the overall implications on transport (that is, road and rail) at the meeting held on 13 March 2013. This was supplied to TfNSW on 19 March 2013.</p> <p>In response, TfNSW advised that:</p> <ul style="list-style-type: none"> - An access study as part of the Maldon-Dombarton design process has been commissioned. This study is considering, among other things, the capacity of the Coniston-Unanderra section in light of forecast demand for freight and passenger services. - The access study is due for completion by the end of 2013. - The outcomes of the access study will be used as the basis for assessing the need for upgrades to increase freight capacity in the Coniston-Unanderra section. - TfNSW will be responsible for identifying opportunities to upgrade the line as required to meet demand. <p>ARTC provided advice on its assumptions from its submission to the Feasibility Study and current capacity based on its understanding on capacity and contracted paths. This is discussed further in Chapter 9.0</p>

Authority	Date of Consultation	Items Discussed	Outcome
NSW Environment Protection Authority (a representative of P&I also attended the meeting)	30 April 2013, 8 May 2013, and 24 May 2013	<ul style="list-style-type: none"> - The scope of the approved Outer Harbour Development and the proposed modification. - Methodologies for the air and noise assessments. - Subsequent written correspondence was made following this meeting concerning methodologies for the air and noise assessments. 	<p>The use of the AERMOD dispersion modelling software (rather than use of CALPUFF) was acceptable.</p> <p>It was agreed that a qualitative assessment is adequate for the construction impact assessment. EPA requested that the assessment identifies pollution controls and monitoring regimes, as well as details concerning the timeframes for the stockpiles at the Port. The assessment of the stockpiles is presented in Chapter 11.0 and Appendix I.</p> <p>The EPA specified that the air quality impact assessment is to assume all berths are occupied as the worst case scenario (e.g. seven ships at berth). The EPA noted the option available to PKOPL to present an additional scenario of five berths at the Outer Harbour Development following PKOPL's opinion that a seven berth scenario would be a low probability of occurring. The assessment of the worst case, with seven vessels at berth at the Outer Harbour Development, is presented in Chapter 11.0 and Appendix I.</p> <p>EPA will accept an assessment as per the Interim Guideline for the Assessment of Noise from Rail Infrastructure Project (DECC, 2007) as it is recognised that this guideline was specified in the DGRs. The assessment is to incorporate the PKOPL rail lines to the south east of the Port Kembla North Railway Station. EPA also advised that it believes the development to be a rail traffic generating development, and that there is logic in PKOPL's opinion that components of the rail noise assessment should be undertaken by rail infrastructure owners. An assessment of rail noise is presented in Chapter 12.0 and Appendix J.</p> <p>P&I requested that a cumulative noise assessment of the Concept Plan be undertaken.</p>

Authority	Date of Consultation	Items Discussed	Outcome
Wollongong City Council	17 May 2013	<ul style="list-style-type: none"> - The scope of the modification - The transport of the additional bulk cargo throughput by rail, with no additional increase in road traffic. - Initial consultations with the community and neighbouring businesses. - Options under consideration for the Old Port Road rail level crossing. 	No objection to the proposed modification was raised during discussions, with Wollongong City Council. The Council will review and comment on the proposed modification once formally lodged with P&I.
NSW Fisheries	22 May 2013	<ul style="list-style-type: none"> - The scope of the modification, and whether or not it would have significant additional impacts on aquatic ecology, particularly fish habitat. 	Based on the information provided, Fisheries NSW advised that it had no objections to the proposed modification to the Port Kembla Outer Harbour Development provided the current conditions of approval related to protecting water quality and aquatic ecology are maintained. This is discussed further in Chapter 17.0 .
Office of Environment and Heritage	27 May 2013	<ul style="list-style-type: none"> - The scope of the modification 	OEH will review and comment on the proposed modification once formally lodged with P&I.
Endeavour Energy, Sydney Water and Jemena	Since the original approvals for the Outer Harbour Development were issued in 2011, ongoing consultations have been held with these key service providers.	Provision for reticulation of services to the multi-purpose terminals via a services corridor which is proposed to run parallel and adjacent to the internal access road which enters the site from Christy Drive. Provision has also been made for reticulation of gas and electricity from Old Port Rd to the Cement Australia Grinding Mill.	It is understood that Endeavour Energy, Sydney Water and Jemena have commenced planning and delivery of services to meet the expected demand of the Outer Harbour Development including demand which may be expected to arise as a result of the proposed modification.

7.3 Community and Stakeholder Consultation

Consultation was undertaken with the neighbouring businesses and the community to discuss the scope of the modification and to seek feedback on the issues for the assessment. This included:

- Presentation to the Port Kembla Pollution Group on 11 May 2013.
- An information flyer sent by email to nearby businesses (refer to **Appendix G**), inviting comments to PKOPL.

7.3.1 Port Kembla Pollution Group

A presentation was given to the Port Kembla Pollution Group on 11 May 2013 by PKOPL. This was attended by representatives from Wollongong City Council, EPA, Port Kembla Chamber of Commerce and a local business, as well as 10 residents. A consultation flyer was also circulated to the attendees.

Issues that were discussed included:

- *Dust from the existing stockpile at the Outer Harbour Development.* PKOPL advised that continuous monitoring indicates that the levels are generally below the criteria and, with the monitoring and management of the stockpile has been overseen by an independent environmental representative, with compliance reports submitted to P&I.
- *Potential increases in rail noise.* PKOPL advised that this would be assessed within the modification report. **Chapter 12.0** provides the consideration of increased rail movements on the noise environment.
- *Potential changes in air emissions from the Outer Harbour Development, including air emissions from stockpiles, vessels and trains.* PKOPL advised that this would be assessed within the modification report. The consideration of potential impacts as a result of the increased stockpiling at the Outer Harbour Development is discussed in **Chapter 11.0** and **Appendix I**.
- *Potential impacts on the Railcorp Port Kembla branch line.* PKOPL advised that the modification would identify the required rail infrastructure improvements within the Outer Harbour which would not impact on passenger rail services. The potential impacts to the rail network and required upgrades are discussed further in **Chapter 9.0**.
- *Commuter car parking at the Port Kembla Station, and the opportunity to use PKOPL land on Old Port Road.* This is considered to be a matter for Railcorp and Transport for NSW, the authorities responsible for the provision of commuter car parks.

7.3.2 Other consultation

The information flyer was circulated by way of email to nearby businesses within the Outer Harbour of the Port (refer to **Appendix G**), inviting comment on the modification. PKOPL then provided responses directly to any enquiries received. Discussions were also held with one directly impacted landowner (Pipe and Engineering Supply Co). The issues raised and responses are provided in **Table 7-2**.

Table 7-2 Summary of consultation with other stakeholders

Issue	Comment
The type of cargo to be handled and increase in throughput. This included enquiries on whether the proposed increase in throughput would be limited to the first multi-purpose berth, and how this increase relates to other operations in the Inner Harbour.	<p>The proposed increase to bulk cargo throughput is limited to the multi-purpose terminal at the Outer Harbour Development.</p> <p>The multi-purpose terminal is intended to be a multi-user facility handling a variety of products. Based on current market interest, the three main commodities contributing to the increased throughput would likely be coal, iron ore and bauxite. Other products would include clinker, granulated slag, sand, woodchips and coke. PKOPL does not consider this would conflict with other operations at other facilities within the Inner or Outer Harbour.</p>

Issue	Comment
The timing for when the Outer Harbour Development would directly impact adjoining properties or other infrastructure (such as the pipeline at Jetty No.4, the Port Kembla Gateway and private land for rail infrastructure).	<p>The relocation of the sulphuric acid pipeline still forms part of the Concept Plan and Stage 1. The timing of the relocation would be dependent on the construction staging, but would occur in the later stages of Stage 1 and before Berth 206 is decommissioned.</p> <p>The Port Kembla Gateway would be retained until the expiration of the lease in 2022.</p> <p>The land acquisition requirements for the rail infrastructure upgrades would be confirmed during detailed design of the infrastructure and in consultation with the affected landowner.</p>
The increase in rail movements and the ability for the rail infrastructure to provide for these additional movements given current capacity constraints and lack of committed improvements to local and intermodal infrastructure. In the absence of any upgrades, this would have impacts on existing users, and growth plans of other businesses.	It is recognised that upgrades to rail infrastructure at the Port and to the broader regional rail network would be required to cater for the additional rail movements that would result as part of the proposed modification. These are discussed further in Chapter 9.0 .
Cumulative environmental impacts when considering other port operations in the Inner and Outer Harbour.	Cumulative impacts are considered in Chapter 22.0 .

7.3.3 Future Consultation

Under the Concept Plan approval, PKOPL is required to implement and maintain a Community Consultation Strategy throughout the development of the Concept Plan. This strategy outlines the mechanisms to facilitate communication between PKOPL, Wollongong City Council, affected and adjoining landowners, as well as the local community on the progress of the project. Key written communication tools used by PKOPL include *Your Port*, a three month supplement in the *Wollongong Advertiser*, the *Harbourline* newsletter, general media releases, and the PKOPL website (discussed below). Representatives of PKOPL also attend a range of community and business groups, including the Port Kembla Harbour Environment Group, the Port Kembla Pollution Meeting, the Port Kembla Chamber of Commerce, and the Illawarra Business Chamber. The strategy was prepared for the initial construction works for Stage 1 of the Concept Plan. PKOPL will continue to progressively review, update and implement this strategy as projects progress..

PKOPL also maintains, on its website (<http://www.portkembla.com.au/page/port-development/outer-harbour/>), information on the Concept Plan and Major Project (Stage 1). This includes compliance reports and audits undertaken as per the requirements of the approvals applying to the Outer Harbour Development.

This page has been left blank intentionally.

8.0 Issues Analysis

8.1 Director-General's Environmental Assessment Requirements

The DGRs for the modification identified the following key environmental issues:

- Transport (rail, shipping, road).
- Noise and vibration.
- Air quality.
- Hydrology and water quality.
- Contamination.
- Aquatic ecology.
- Visual amenity.
- General construction impacts.

8.2 Screening of Relevant Issues

In preparing the Environmental Assessment, an initial screening process has been undertaken to determine the key issues in relation to the modification of the Outer Harbour Development. The outcome of this process is outlined in **Table 8-1**. Key issues are considered moderate-high or high risk issues. Other issues are assessed as being low-moderate or low risk issues.

Table 8-1 Issues analysis for the Outer Harbour Development modification

Modification	Key Issues	Other Issues	Comment
Increased throughput of bulk commodities with associated growth in train movements.	<ul style="list-style-type: none"> - Rail, Noise and vibration - Air quality 	<ul style="list-style-type: none"> - Road traffic and transportation - Socio-economics - Terrestrial ecology - Landscape and visual amenity - Waste 	<ul style="list-style-type: none"> - Larger throughput may increase noise and vibration and air quality. - No increase in road traffic due to the movement of additional bulk throughput by rail. - Potential visual and ecology impacts related to increased operational trains.
Construction of additional rail and road infrastructure to accommodate increased train movements.	<ul style="list-style-type: none"> - Rail - Noise and vibration - Air quality 	<ul style="list-style-type: none"> - Terrestrial ecology - Landscape and visual amenity - Heritage - Soils and groundwater - Surface water quality and hydrology - Contamination - Qualitative human health and ecological risk - Hazard and risk - Waste 	<ul style="list-style-type: none"> - Larger number of trains would potentially increase noise and air quality impacts. - Time needed for trains to pass through bulk unloader and balloon loop would impact local road network (Old Port Road). - Rail bridge over Old Port Road would require upgrade to support additional train movements.

Modification	Key Issues	Other Issues	Comment
Growth in shipping movements and accommodation of larger vessels (including additional dredging and reduction of reclamation footprint).	<ul style="list-style-type: none"> - Noise and vibration - Air quality - Visual amenity 	<ul style="list-style-type: none"> - Hydrology and water quality - Coastal hydrodynamics - Aquatic ecology - Contamination - Qualitative human health and ecological risk - Preliminary hazard analysis - Waste - Cumulative impacts 	<ul style="list-style-type: none"> - Larger vessels and more frequent movements may increase noise and vibration, air quality and impact visual amenity. - Change to dredging volumes as a result of refinement of design. - Existing management framework outlined in conditions of consent would be used to manage contamination, hydrodynamics, hydrology and surface water quality.
An enlarged operational land area for Stage 1 from 9ha to 22ha to accommodate increase in bulk volumes.	<ul style="list-style-type: none"> - Noise and vibration - Air quality 	<ul style="list-style-type: none"> - Surface Water Quality and Hydrology - Road traffic and transportation 	<ul style="list-style-type: none"> - Change in operational area would necessitate extension of new Port road link earlier in construction program. - Operational plant and equipment in southern portion of multi-purpose terminal may impact noise and air quality at closest sensitive receiver.
Construction of shed facilities for product storage, rather than open stockpiles, and enclosed conveyors.	<ul style="list-style-type: none"> - Air quality - Landscape and visual amenity 	<ul style="list-style-type: none"> - Sustainability 	<ul style="list-style-type: none"> - Introduction of sheds would change visual landscape of the development. - Potential improvement in air quality and noise impacts expected from enclosure of bulk materials.
Change in alignment of Salty Creek.	<ul style="list-style-type: none"> - NA 	<ul style="list-style-type: none"> - Surface water quality and hydrology - Aquatic ecology 	<ul style="list-style-type: none"> - Potential hydrological impacts (if any) related to alignment change. - Potential impacts on aquatic fauna in Salty Creek.
Increase in operational workforce.	<ul style="list-style-type: none"> - NA 	<ul style="list-style-type: none"> - Socio-economics 	<ul style="list-style-type: none"> - Increased bulk throughput would lead to employment generation and associated benefits in the local region.

Modification	Key Issues	Other Issues	Comment
Imported fill sources	- NA	- Landscape and visual amenity - Surface Water Quality and Hydrology	- Potential erosion hazards associated with sediment-laden surface water runoff. - Visual impact of increased stockpile sizes.

8.3 Prioritisation of Issues

Based on the screening process, the modification would lead to significant changes to the following environmental issues:

- Rail.
- Road traffic and transportation.
- Air quality.
- Noise and vibration.

These issues are therefore considered key to the modification and have undergone detailed assessment in **Chapter 9.0** to **Chapter 12.0**, respectively, incorporating quantitative modelling where necessary.

It is noted that the DGRs highlight particular requirements relating to the issues of contamination, hydrology and water quality, aquatic ecology, visual amenity and general construction impacts, which have been addressed qualitatively in:

- **Chapter 13.0** (Soils and Groundwater),
- **Chapter 14.0** (Surface Water Quality and Hydrology),
- **Chapter 15.0** (Harbour Sediment Quality),
- **Chapter 16.0** (Qualitative Human Health and Ecological Risk Assessment),
- **Chapter 17.0** (Aquatic Ecology),
- **Chapter 18.0** (Terrestrial Ecology)
- **Chapter 19.0** (Coastal Hydrodynamics) and
- **Chapter 20.0** (Landscape and Visual Amenity).

The remaining issues of preliminary hazard analysis, socio-economics, heritage, sustainability, climate change and waste have also been addressed qualitatively in **Chapter 21.0**. Cumulative impacts have been assessed in **Chapter 22.0**.

This page has been left blank intentionally.