

# ASSESSMENT REPORT

## Section 75W Modifications Outer Harbour Development, Port Kembla

### 1 BACKGROUND

Port Kembla is a major industrial and employment precinct within the Illawarra Region. As well as this, it is one of the three international trade ports in NSW, the others being Port Botany and the Port of Newcastle (Figure 1). Historically, Port Kembla has primarily been used as a bulk commodities port servicing coal, grain and other mineral exports, as well as for steel production and exportation.

In recent years, as part of the State Government's *NSW Ports Growth Plan*, Port Kembla has received a portion of shipping, general cargo and car import activities, previously handled by Port Jackson in Sydney Harbour. The Port has accommodated these relocated trades via a newly built general cargo handling facility, in the Port Kembla Inner Harbour.



Figure 1: Port Kembla Harbour

#### Outer Harbour Development Concept Plan

On 3 March 2011, the then Minister for Planning approved a Concept Plan (08-0249C) proposed by the Port Kembla Ports Corporation (PKPC), for the Port Kembla Outer Harbour Development (see Figures 1 and 2), under Part 3A of the *Environmental Planning and*



Assessment Act 1979 (The Act). The project is located in the Wollongong local government area (LGA).

The concept plan will be developed over 3 stages and includes:

- reclamation (and associated dredging) of approximately 42 ha of land in the Outer Harbour;
- demolition of the existing No. 3 Jetty and No. 4 Jetty and demolition and refurbishment of No. 6 Jetty (Port Kembla Gateway);
- construction and operation of 3 multi-purpose terminals and berths and 4 container terminals and berths;
- construction/upgrade of existing road and rail infrastructure; and
- extension of the Salty Creek and Darcy Road drain under the reclamation footprint.

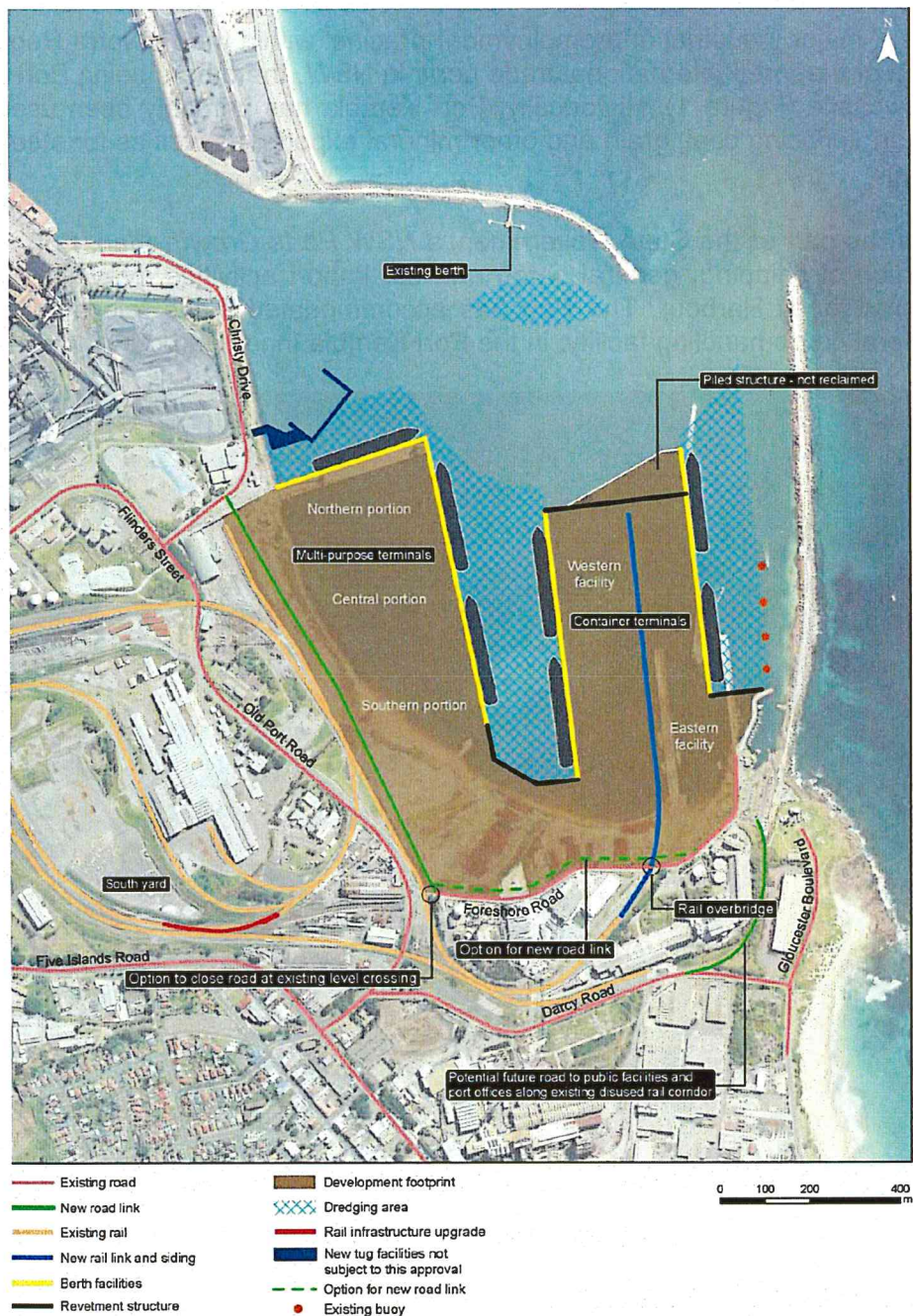


Figure 2: Approved Concept Plan – Port Kembla Outer Harbour Development

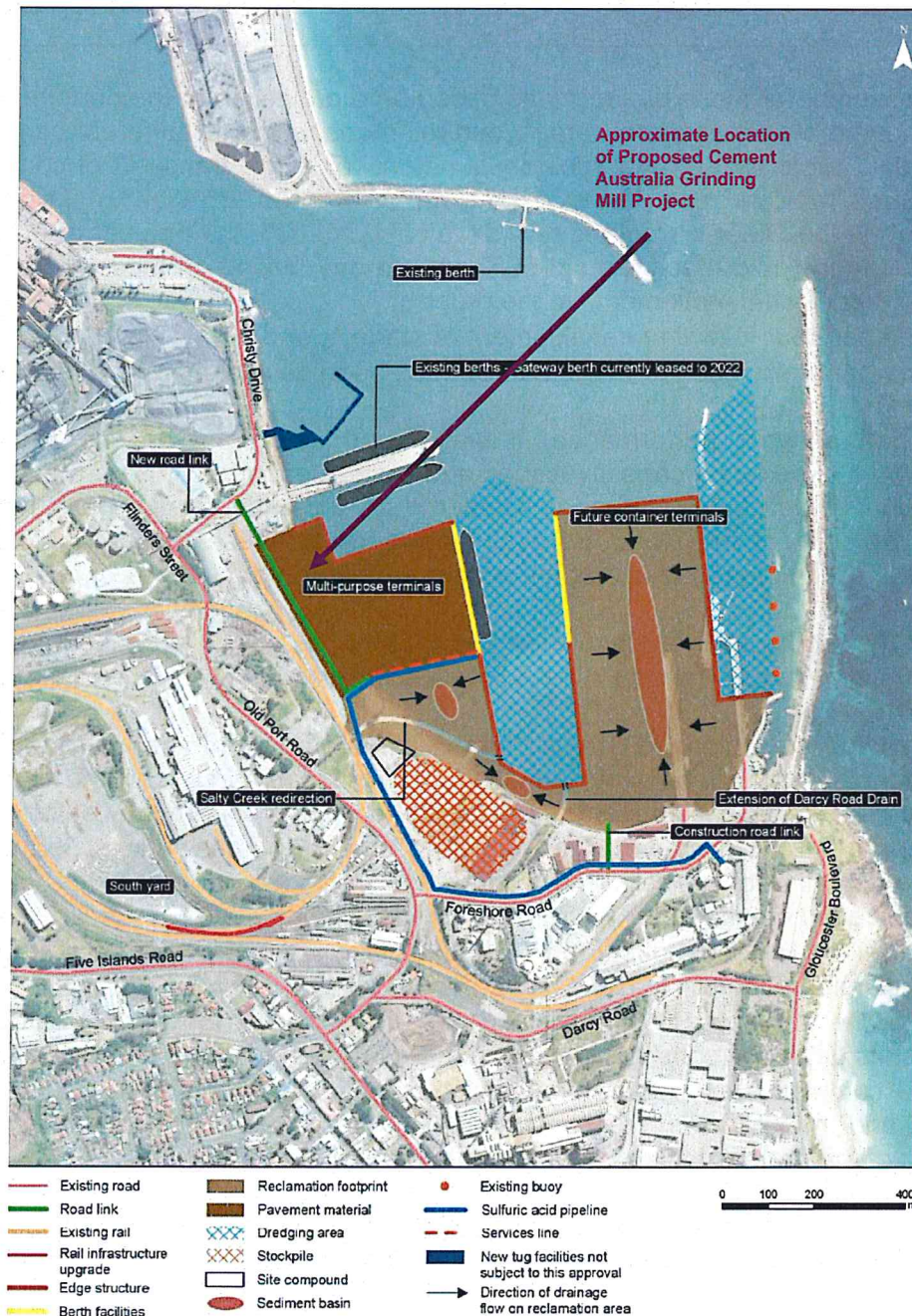


The concept plan is to be developed over the following timeframes:

- Stage 1: 2011 – 2018
- Stage 2: 2014 – 2025
- Stage 3: 2026 – 2037

### Stage 1 Project Approval

At the same time, the then Minister also approved a project application for stage 1 of the Outer Harbour Development (08\_0249P), which includes the majority of the dredging and reclamation activities, as well as the construction and operation of a new multi-purpose terminal (See Figure 3). Construction has recently commenced on the stage 1 project and is expected to be carried out over an 18 month period.



**Figure 3: Approved Stage 1 Project – Port Kembla Outer Harbour Development**



The stage 1 project also has 3 stages, known as 1A, 1B and 1C, as summarised below.

Stage	1A (present – 2014)	1B (present – 2015)	1C (2014 – 2018)
Works	<ul style="list-style-type: none"> <li>• Reclamation and dredging for the central portion of the multi-purpose terminals.</li> <li>• Civil works for construction of terminal facilities including services.</li> <li>• Operation of central multi-purpose berth.</li> <li>• New road links.</li> <li>• Relocation of sulphuric acid pipeline to central multi-purpose berth.</li> </ul>	<ul style="list-style-type: none"> <li>• Demolition of No.3 Jetty.</li> <li>• Reclamation and dredging for the western container facility.</li> <li>• Wharf construction for the first container berth.</li> </ul>	<ul style="list-style-type: none"> <li>• Demolition of No.4 Jetty.</li> <li>• Reclamation and dredging for the eastern container facility.</li> <li>• Reclamation and dredging for the southern portion of the multi-purpose terminals.</li> <li>• Extension of Salty Creek and Darcy Road Drain.</li> <li>• Road upgrades.</li> </ul>

The traffic assessment for these projects was based on a projection of the ports full operational capacity and incorporated a series of target road/rail modal splits for different cargo and berth types. The modal split is based on a substantial use of rail in the transport of container goods (10%/90% towards rail) and to a lesser extent, for bulk cargo (35%/65%). The assessment indicated that when the Outer Harbour is fully developed in 2037, the number of trucks going to and from the harbour would reach around 505 trucks a day, based on these modal splits. This equated to peak hour traffic movements in the order of:

- 29 vehicles per hour following development of stage 1; and
- 84 vehicles per hour once the whole harbour has been developed and is operational.

In terms of road network performance, it was found that some of the road links and intersections would experience capacity issues and would become fully saturated over time as the Outer Harbour is developed. It was concluded that whilst the existing road network could accommodate Stage 1 of the Outer Harbour Development, these issues would need to be addressed by PKPC in stages 2 and 3 of the development through a series of road upgrades.

To ensure that the modal splits are achieved and that the necessary upgrades are carried out, there are a series of requirements in the concept plan and stage 1 project approvals which stipulate that PKPC:

- cannot develop stages 2 and 3 until there is adequate rail infrastructure and intermodal capacity in place (or will be provided in a timely manner) to support the development of these stages, including the ability to achieve the target transport modal splits;
- must prepare a Rail Master Plan to provide a strategic framework for the development and implementation of the rail infrastructure and upgrades necessary for stages 2 and 3 and the achievement of the target transport modal splits;
- is only permitted to construct stages 1B and 1C with the approval of the Director-General following consideration of the Rail Master Plan (above);
- adhere to the traffic caps imposed in these approvals to ensure that road traffic generation is generally consistent with the levels forecasted in the traffic assessment; and
- prepare a cumulative impact protocol, which details the measures to be implemented to manage and monitor the cumulative impacts associated with the construction and operation of the project stages in relation to road and rail traffic.

At present, PKPC have commenced construction of stage 1A but cannot carry out any further development at this stage until these requirements are addressed.

The rail infrastructure and intermodal capacity to accommodate the shift to rail transportation is to be provided in stages 2 and 3. The main reasons that the modal split is to be introduced is because there is a lack of land available to support the extensive container storage areas required for truck transport and there are limitations on the existing road network in the area to accommodate the forecasted traffic volumes.



As a result, traffic caps were imposed in both the concept plan and stage 1 project approvals based on the peak hour traffic movements once the modal splits had been achieved.

#### Cement Grinding Mill Project

On 7 June 2010, before the concept plan and stage 1 project had been approved, the Department received a Major Project Application from Cement Australia (CA) for the development of a Cement Grinding Mill (10\_0102) in the northern portion of the proposed multi-purpose terminal where newly created port side land will be created by PKPC (see Figure 3). CA's grinding mill would be the first industry operator to be located in the new Port Kembla Outer Harbour Development.

Following consultation with the RTA, it became clear during the assessment of this application that the additional vehicle movements generated by the project would mean that:

- the traffic cap of 29 vehicles per hour/day set in the stage 1 approval would be exceeded by 13 once CA's 42 truck movements were added; and
- exactly half of the traffic cap of 84 vehicles per hour/day set in the concept plan approval would be consumed by the 42 truck movements to be generated by CA.

To address this, following consultation with the Department, the RTA and CA, PKPC has submitted two applications to modify its concept plan and stage 1 project approvals in order to increase the traffic caps in both these approvals to account for the traffic to be generated by this project.

There are certain other requirements and conditions in these approvals that need to be complied with (see Section 4). The Department's assessment of the CA grinding mill found that it would generally comply with all relevant conditions and requirements in these approvals, with the exception of the traffic caps.

This report assesses the proposed modifications to the concept plan and stage 1 project approvals for the Outer Harbour Development as outlined above and should be considered concurrently with the assessment report for CA's grinding mill project.

## **2 PROPOSED MODIFICATIONS**

On 4 May 2011, PKPC submitted two applications to modify its Concept Plan (08\_0249C) and Stage 1 Project (08\_0249P) Approvals for the Outer Harbour Development, under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

PKPC is seeking to increase the traffic caps in both these approvals to account for the traffic to be generated by the CA project. These traffic caps are outlined in Requirement 2.7, Schedule 3 of the Concept Approval and Condition B.3, Part B of the Stage 1 Project Approval. Minor amendments to other conditions related to traffic movements in these approvals would also be required.

The key changes that would be required to be made to these traffic caps because of the CA project are (Table 1):

- an increase of permitted truck movements from 21 to 62 for the stage 1 project resulting in the total number of vehicle movements being increased from 29 to 70; and
- an increase of permitted truck movements from 64 to 102 for the concept plan resulting in the total number of vehicle movements being increased from 84 to 121.

Employee numbers would remain the same (other than being subjected to the pro-rata reduction) because the impact on traffic volumes that would be generated by these (10) employees are considered negligible and has not therefore subjected to detailed assessment.



**Table 1: Existing and Proposed Hourly Traffic Movements for the Outer Harbour Development**

		Stage 1 Project / CA	Concept Plan / CA
Existing Cap	Trucks	21	64
	Employees	8	20
	Total	29	84
Pro-Rata Reductions *	Trucks	1.3	4.1
	Employees	0.5	1.3
	Total	1.9**	5.4
Cap Minus Pro-Rata Reduction	Trucks	19.7	59.9
	Employees	7.5	18.7
	Total	27.1	78.6
CA Truck Movements	Trucks	42	42
Modified Cap	Trucks	62	102
	Employees	8	19
	Total	70**	121**

\* The RTA has calculated these traffic movement numbers based the area of land taken up by the Cement Grinding Mill project, in comparison to the entire Concept Plan area. The existing Outer Harbour is approximately 23.4ha, given that PKPC have approval to reclaim approximately 42 ha, the entire Outer Harbour Development area would result in 65.4 ha of land in total. The pro-rata reduction is based on the Cement Grinding Mill taking up approximately 6.42% of this overall area.

\*\* Subject to rounding.

Some other aspects of the concept plan approval would also need to be amended to facilitate the CA project, including:

- incorporating a description of CA's grinding mill project in the 'Proposal' section; and
- adding the grinding mill project in Requirement 2.29, Schedule 3, which requires that PKPC prepare a Cumulative Impact Protocol prior to construction commencing on the future stages of the Outer Harbour Development. The new protocol would detail measures to be implemented to manage and monitor the cumulative emissions associated with:
  - the operation of the stage 1 project;
  - the construction of the grinding mill; and
  - stages 2 and 3 of the Outer Harbour Development.

The Department also recommends that the opportunity be taken to transfer a number of conditions specific to the development of stage 1 of the Outer Harbour Development from the concept plan to the stage 1 project approval in order to better clarify PKPC's role in the future environmental management regime within the concept plan area, its operations and subsequent projects in the future. These requirements include undertaking compliance tracking in the concept plan area, as well as each proponent appointing an environmental representative for each project and carrying out incident reporting.

### 3 STATUTORY CONTEXT

#### Approval Authority

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within this section of the EP&A Act.

The Department notes that:

- the proposed modifications do not seek approval for a new and different project for which approval was granted; and
- any potential impacts would be minimal and could be appropriately managed through the existing or modified conditions of approval.

Whilst the modification meets the terms of the then Minister's delegation of 25 January 2010 (and would therefore be determined by the Department under delegation), it is recommended that the modification be determined concurrently with the Cement Grinding Mill Major Project Application by the Planning Assessment Commission (PAC). Accordingly, a project-specific instrument of delegation has been prepared to delegate the determination of the application to the PAC.



### Exhibition and Notification

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit this application. Notwithstanding this, the Department referred the application to Wollongong City Council; the Office of Environment and Heritage (OEH) (formerly known as the Department of Environment, Climate Change and Water); and the Roads and Traffic Authority (RTA).

The **RTA** did not object to the proposed modifications and was satisfied that CA's project would not result in an unacceptable level of additional traffic on the surrounding road network.

**Council** and **OEH** raised no objections to the proposed modifications.

Additional consultation with other Government agencies and neighboring sites was considered unnecessary because CA's grinding mill project (which contained the transport assessment on which the proposed traffic 'cap' increase is based) had already been exhibited earlier in the year (from 10 February 2011 until 14 March 2011).

## **4 ASSESSMENT**

It is important to note that the existing traffic caps were premised on the modal splits that were contemplated in the concept plan for the Outer Harbour Development. The implementation of this shift from road to rail is programmed to take place over the next 25 years as subsequent stages are developed (see Section 1). Because CA lodged its application in the meantime, the traffic caps would need to be raised to accommodate the extra traffic volumes it would generate. Therefore, while it seems that the caps are proposed to be substantially raised, the existing caps are in a way artificial because they reflect a future, post-modal shift scenario, rather than current traffic environment in the area.

The Department and the RTA have carried out a rigorous assessment of the traffic impacts that would be generated by the CA project in the context of the Outer Harbour Development. As noted above, this is contained in the assessment report for that project, and should be considered concurrently with this assessment report.

The relevant findings of the Department's assessment with regards to the assessment of these modifications are as follows:

- CA has justified that it is not currently viable for it to utilise the existing rail network but acknowledges that there may be potential for it to do so in the future once there is adequate rail infrastructure and intermodal capacity in place;
- despite the project's part reliance on ship transportation to support its operations, the project would still generate 744 trucks a day or 42 truck trips an hour for 30% of the year. There would be a periodic shutdown for 15% of the year and there would be less truck movements during the remaining 55% of the year;
- these additional traffic volumes are considered negligible in the context of the existing and forecasted traffic volumes on this part of the road network because it is already heavily used as a main haulage route by existing industrial and port-related operators;
- the Department and the RTA are satisfied that the traffic movements associated with CA and the Outer Harbour Development would result in relatively minor impacts on queue lengths and intersection delays and can be adequately accommodated by the existing road network;
- CA's traffic movements would not result in any significant traffic related impacts above those identified in the future short term (stage 1) traffic predictions in the area;

As a result of the above, neither the Department nor the RTA consider it necessary for CA to be responsible for upgrading these intersections, as the delays shown in the year 2023 would not be a direct result of CA's traffic movements alone, but rather a function of the intersection reaching capacity in any case.



PKPC, the Department and the RTA, are aware that these intersections will require upgrading in the future. As a result, PKPC is required to reassess the capacity of the road network when it prepares its development applications for stages 2 and 3 of the Outer Harbour Development and consider upgrading these intersections before constructing future stages of the Outer Harbour Development. This requirement is reflected in the concept plan, which outlines requirements for the future assessment of stages 2 and 3.

Coupled with this is the requirement for PKPC to achieve the transport modal splits that it has committed to achieving during stage 2 of the development (as discussed above). This may also present an opportunity to reduce truck movements associated with the Cement Grinding Mill Project in the future.

Based on the above, the Department is satisfied that the CA project would have acceptable traffic impacts on the basis that the capacity of the road network would again be assessed in detail, before future stages of the Outer Harbour Development are permitted to be developed and, through this process, PKPC is required to further consider intersection upgrades (and any other ameliorative works) in this area.

The Department, in consultation with Council and the RTA, has assessed the potential cumulative impacts associated with traffic and access arrangements for the Cement Grinding Mill project and the Outer Harbour Development. Both the Department and the RTA consider that the traffic volume to be generated by the project is considered acceptable and would not adversely impact on network efficiency or safety. Furthermore, the Department notes that future rail infrastructure upgrades, as contemplated in the Concept Plan, provides the potential for the CA to increase the receipt of materials and delivery of product by rail rather than road.

As a result of this assessment, the Department and the RTA agrees that the traffic caps in the concept plan and stage 1 project approvals for the Outer Harbour Development should be increased to accommodate CA's project.

## **5 RECOMMENDED MODIFICATIONS**

The Department has recommended adjustments to the traffic movement 'cap' for the Concept Plan and Stage 1 project approval in accordance with the traffic numbers outlined in Table 1, as well as administrative modifications regarding the management of the site and future projects.

## **6 CONCLUSION**

The Department has assessed the modification applications and supporting information in accordance with the relevant requirements of the EP&A Act, including the objects of the EP&A Act and the principles of ecologically sustainable development.

The assessment has found that there is a demonstrable need for the modifications and the benefits sufficiently outweighs its costs.

Consequently, the Department is satisfied that the proposed modifications should be approved.



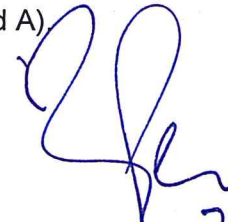
## 7 RECOMMENDATION

It is RECOMMENDED that the Planning Assessment Commission:

- **approve** of the proposed modifications under Section 75W of the EP&A Act; and
- **sign** the attached instruments (tagged A).


 3/8/11

Daniel Keary  
A/Executive Director

 7/8/11

Richard Pearson  
Deputy Director-General

Felicity Greenway  
Mining & Industry Projects

  
Sam Haddad  
Director-General  
9/8/2011.



## **APPENDIX A: EXISTING APPROVALS**

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- Concept Plan Approval for the Port Kembla Outer Harbour Development (08-0249C); and
- Stage 1 Project Approval for the Port Kembla Outer Harbour Development (08\_0249P).