

8 September 2011

Determination of the Port Kembla Cement Grinding Mill Project and Modification to the Port Kembla Outer Harbour Development

Background

On 3 March 2011 the then Minister for Planning approved a Concept Plan for the reclamation and development of 42 ha of land within the outer harbor of Port Kembla over approximately 35 years.

Stage 1 of the Concept Plan was also approved and provides for the majority of the dredging and reclamation and the development of a multipurpose terminal on the northwest portion of the site.

As part of the approval of the concept plan and stage 1 project, traffic caps were imposed to ensure the road/rail modal split projections were achieved (ensuring substantial use of rail).

Modification to the Port Kembla Outer Harbour Concept Plan and Stage 1 Project
The traffic caps in the Outer Harbour stage 1 project are currently limited to 29 vehicle
movements per hour. The Cement Grinding Mill project would exceed this limit and would
also consume half of the traffic cap (84 vehicle movements per hour) for the entire concept
plan area. Consequently modifications to increase the traffic caps in both the concept plan
and stage 1 project are being sought concurrently with the application for the Cement
Grinding Mill Project.

Cement Grinding Mill Project

Cement Australia Pty Ltd is now seeking approval to develop a cement grinding mill and associated infrastructure within stage 1 of the Port Kembla Outer Harbour Development. The mill would operate 24 hours a day and would produce 800,000 tonnes of cement and 300,000 tonnes of granulated ground blast furnace slag a year. Clinker would be delivered by ship with other materials to be delivered by truck (22 movements per hour). Finished product would be dispatched in pneumatic road tankers (20 movements per hour). Consequently the project would generate a total of 42 truck movements per hour.

Delegation to the Commission

On 28 May 2011 the Honourable Brad Hazzard MP Minister for Planning and Infrastructure delegated his powers and functions to determine Concept Plans and Project applications to the Planning Assessment Commission.

On 17 August 2011 the Honourable Brad Hazzard MP Minister for Planning and Infrastructure also delegated his powers and functions to modify the Outer Harbour Development Concept Plan and stage 1 Project to the Commission.

The Cement Grinding Mill Project and modifications to the Port Kembla Outer Harbour Concept Plan and Stage 1 Project were subsequently referred to the Planning Assessment Commission for determination under the Minister's delegations.

The Commission consisted of Ms Janet Thomson (chair) and Mr John Court.

The Department's Assessment Report

Modification to the Port Kembla Outer Harbour Concept Plan and Stage 1 Project

The proposed modification is to increase the traffic caps in the concept plan and Stage 1 project approvals to accommodate the traffic that will be generated by the proposed Cement Grinding Mill project if approved. The RTA, Wollongong City Council and the Office of Environment and Heritage did not object to the proposed modification. The RTA was satisfied that the additional traffic from the Cement Grinding Mill would not result in an unacceptable level of impact on the surrounding road network.

The Department's assessment found that the additional traffic generated from the Cement Grinding Mill project would be negligible in the context of the existing and forecasted traffic volumes in the local and regional road networks. Any future intersection/network improvement requirements would be a network capacity issue that should be re-assessed before construction of future stages. Both the Department and the RTA concluded that the proposed Cement Grinding Mill would not adversely impact on network efficiency or safety. The Department also considered there is a demonstrable need for the modifications and the benefits sufficiently outweigh its costs.

Cement Grinding Mill Project

The Department received a total of 9 submissions, of which 8 were from public authorities and one from the public.

The key isues identified by the Department included:

- Transport;
- Air quality; and
- Noise.

Other issues included stormwater and drainage, contamination, visual, hazards, and flora and fauna.

The Department considered the traffic generated by the proposal acceptable and would not have a significant impact on the efficiency and safety of the road network. Short term construction traffic could be managed with appropriate conditions of consent.

In terms of air quality, the Department found the project would comply with all air quality criteria, except for some minor exceedances of the short term 24-hour PM10 criteria. The project would contribute only a fraction of overall dust in the local and regional air shed. Both the Department and OEH are satisfied potential dust emissions have been minimised as far as practicable. The recommended conditions of approval would ensure air quality impacts would be adequately managed and monitored.

To address the issue of green house gas, the Department recommended an Energy Management Plan to be prepared and implemented to identify measure to reduce energy consumption and greenhouse gas emissions in the long term.

Although the Department found that noise impacts from the proposal would meet relevant environmental critieria, it considered appropriate conditions of approval should be included to ensure issues arising from construction and operational noise are appropriately managed with minimum impact on the surrounding areas.

The Department's assessment report concluded that the proposal would not have unreasonable impacts on existing or future development in the area. The project would assist in achieving the State and local planning objectives by providing temporary construction and long term employment, having flow-on economic benefits to the local and regional economies and providing a significant supply of cement and cement alternatives to the NSW construction market. It is in the public interest to approve the application with conditions.

Meeting with the Department of Planning and Infrastructure

The Commission met with Mr Chris Wilson, Ms Felicity Greenway, Mr Glenn Snow, Mr Nicholas Hall and Ms Haley Rich of the Department of Planning and Infrastructure on 19 August 2011 for a briefing. The meeting discussed the following issues:

- Cap on traffic movements;
- Modal split provisions;
- rail haulage v road haulage;
- cumulative impacts;
- air quality impact and assessment:
- monitoring of odour; and
- contamination.

On 25 August 2011, the Commission sought clarification from the Department on a number of issues that were discussed at the meeting. The Department's responses were received on 5 September 2011 (Attachment 1). Some aspects of analysis of the economics of rail-versus-road transport were provided by the proponent on a commercial-in-confidence basis and are not included in this report, although they were considered by the Commission.

Commission's Comments

The Commission considered the Department's responses in most instances adequately addressed the issues of its concern, particularly the revised recommended condition 22 of Schedule 3 of the project application for the Cement Grinding Mill. However, the Commission found further strengthening of the condition is required to ensure externalities such as impacts and costs on other road users and the environment should be taken into consideration in the further assessment of rail transport required by the project Approval.

The Commission also carefully reviewed aspects of cumulative impact management in making its determination. While traffic and air quality impacts arising from the Cement Grinding Mill project, the first facility to establish within the PKPC site, will meet amenity and environmental criteria, they appear from analyses in the EA to use much of the available capacity to absorb such impacts. This signals a possible future issue as new facilities seek to establish within the site. This aspect needs to be directly addressed in the development of the Cumulative Impact Protocol called for in the Concept Plan Approval. The Commission found an additional requirement should be included to ensure equitable and rational allocation of available environmental capacity is implemented between existing and future facilities within the PKPC site.

The Commission carefully considered environmental impacts arising from possible toxic emissions, visible plumes and the sourcing of slag materials and is satisfied that any impacts will be adequately managed under the conditions of approval.

Commission's Determination

The Commission has considered the Department's assessment report including public submissions, the applications and associated documents provided by the Department and is satisfied that the issues raised in submissions have been adequately addressed by the Department and supports the recommendation to approve the application with conditions.

The modifications to the Outer Harbour concept plan and Stage 1 project application and the project application for the Cement Grinding Mill are approved subject to the Department's recommended conditions as modified below.

Modification to Outer Harbour Concept Plan

Schedule 2, condition 2.5(a) be amended to read:

2.5(a) demonstration that the project is generally consistent with the requirements of this approval, the scope and intent of the concept plan outlined in the documents under requirement 1.1 of this approval, and that the project will not unduly impact on the ability of the site and future development to meet acceptable environmental limits.

Project application - Cement Grinding Mill project

Replace condition 22 with the following condition:

Rail Feasibility Report

- 22. The Proponent must commission a rail feasibility report to the satisfaction of the Director General. The report must:
 - (a) be prepared by a suitably experienced and independent expert whose appointment has been endorsed by the Director General:
 - (b) be submitted to the Director General for approval prior to commencement of operations;
 - (c) be prepared in consultation with Transport NSW, RailCorp, the RTA and PKPC;
 - (d) assess the economical, logistical and operational feasibility of the project utilising the rail network to receive raw materials and transport products to its customers and taking into account of externalities such as impacts and costs on other road users and the environment:
 - (e) include consideration of all relevant national and state freight and port strategies and studies, including the Maldon to Dombarton Feasibility Study;
 - (f) include consideration of any relevant documents prepared by PKPC for the Outer Harbour Development including the Rail Master Plan; and
 - (g) recommend whether or not the existing rail network is capable of being utilised by the Proponent to operate the project, and if possible, at what time.

The Instruments of approval are in Attachment 2 of this report.

Janet Thomson

PAC Member

John Court PAC Member

Attachment 1

Department of Planning and Infrastructure Response to Commission's request



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Ms Janet Thomson Member – Planning Assessment Commission GPO BOX 3415 SYDNEY NSW 2001

Dear Ms Thomson

Port Kembla Cement Grinding Facility and Outer Harbour Development Modifications
Response to Information Request from the Planning Assessment Commission

I refer to your correspondence of 25 August 2011, seeking clarification on a number of matters regarding the above mentioned applications that are being determined by the Planning Assessment Commission.

The Department provides the following response to the questions:

 Further clarification on the reasoning or justification for the existing cap on truck and total vehicle movements, as set out in the existing concept plan approval.

The existing caps on truck and total vehicle movements that are set in the concept and stage 1 project approvals were derived from the estimated peak hour traffic movements for the outer harbour development once it becomes fully operational (in 2037). The peak hour traffic movements were, in turn, extrapolated from PKPC's trade forecast scenarios (i.e. the type and volume of freight that would be handled in the Outer Harbour each year).

A range of assumptions were applied to these forecast scenarios including:

- a modal split between road and rail of:
 - 35% road and 65% rail for bulk/dry goods;
 - > 80% road and 20% rall for general cargo; and
 - > 10% road and 90% for containers.
- average truck loading bulk (35 tonnes), general cargo (25) and containers (2 twenty foot equivalent units or TEU);
- hours of operation of the proposed terminals 24 hours per day, 7 days per week, 365 days a year; and
- peak hour situation the number of truck movements in the busiest hour is 50% greater than the average hour during the remainder of a typical day.

Based on the above methodology, peak hour traffic generation for both the concept plan (full development) and stage 1 project approvals, is summarised in the table below.

NSW Department of Planning and Infrastructure, GPO Box 39, SYDNEY NSW 2001 DX 10161 Sydney 5 kek Exchange - Website: www.planning.nsw.gov.au

Predicted peak hour traffic generation

Element	Bulk	General	Containers	
Volume per year	4.25Mt	2M1	1,200,000 TEU	
Proportion by road	50%	80%	10%	
Volume by road per year	2.125Mt	1,6M1	120,000 TEU	
Truck loading (per truck)	35 tonnes	25 tonnes	2 containers	
Trucks per year	60,714	64,000	60,000	
Working days per year	365	365	365	
Trucks per day (average)	166	175	164	
Hours of operation	24	24	24	
Trucks per hour (average)	7	7	7	
Peak hour factor	1.5	1.5	1.5	
Trucks per heur (peak)	10	11	10	
Two-way peak hour truck movernents	21	22	21	
Total for Stage 1 (2016)	29 vehicles per hour (bulk only + 8 employee vehicles)			
Total for Concept Plan (2036)	84 vehicles per hour (bulk, general cargo and containers + 20 employee vehicles)			

Note: Traffic generation from Stage 1 would come from bulk trade alone, where the predicted two-way peak hour truck movements are 21, and a total of 29 vehicle movements, with the inclusion of employee vehicle movements. When the unite Concept Plan is fully operational, the peak hour figures would increase to a fatal of 84 vehicle movements, including the contribution of 20 employee relatives.

Based on the above, the Department translated the predicted traffic numbers during peak periods (from the above table) into Modification 2.7 in the concept plan approval and Condition B3 in the stage 1 project approval whereby:

- traffic generated from the stage 1 project must comply with the figures predicted and proposed; and
- similarly, combined traffic numbers from all stages must be within the predicted maximum numbers when the entire development is fully operational.

Consideration of traffic movements at the concept plan level has enabled a holistic assessment of the total outer harbour development over the life of the project and allows future development in the region to consider traffic impacts associated with the outer harbour development as a whole.

The capping of the figures for the stage 1 project and the concept plan (full development) reinforces the scope of the development as defined in the environmental assessment, and allows traffic volumes to be apportioned between the three key stages of the concept plan. The Department considers that without limits on road traffic volumes, the achievement of the desired model split may be undermined, and may result in increased traffic congestion and poor performance of the road network at a much earlier time than if traffic numbers are controlled as the concept plan is progressively developed over time.

2. Justification for the increased truck movement cap and an assessment as to whether there will be any adverse environmental impacts as a result of the increase in the truck movement cap. If there are impacts, can management measures be introduced to reduce these?

When the traffic caps were being developed, the traffic that was estimated to be generated by the Cement Australia project was not included. The main reason for this was that these applications were at different stages of the assessment process (the application for the Cement Australia project was partway through the exhibition period whilst the outer harbour concept plan and stage 1 projects were determined). As a result, the Department could not pre-empt that the Cement Australia project would be approved and could not therefore include the traffic movements from this project as a component of these caps.

Both the RTA and the Department are satisfied that the additional truck movements created by the Cement Australia project (and hence the associated increase in the truck movement cap) can be accommodated in the surrounding road network in the short to medium term without

adversely affecting the safe and efficient operation of this network. This would have been reflected in any caps imposed on the Concept Plan if timing and certainty of the approvals process for the Cement Australia proposal had permitted.

Notwithstanding this, it was acknowledged that the existing haulage routes that are to be utilised by operators in the outer harbour will progressively reach capacity over time. To address, this, PKPC is required to carry out a series of road and intersection upgrades in the future before it is permitted to develop stages 2 and 3 of the outer harbour (estimated to be in 2014 and 2026 respectively). PKPC must also develop rail infrastructure and intermodal capacity within the same timeframe so it can achieve the transport shift from road to rail that it committed to (and on which approval of the project and the associated traffic caps was based).

There is also a requirement for Cement Australia to prepare and implement a Traffic Management Plan for the project in consultation with Council and the RTA. As part of this plan, Cement Australia is required to develop ways to reduce the traffic impacts of the project and explore the possibility of scheduling delivery and dispatch of product outside peak hour traffic periods.

The only other environmental impacts that could arise from increasing truck movements on the existing road network are increased noise and dust emissions. The Department has assessed these impacts and is satisfied that they would be negligible in this case.

Overall, the Department remains satisfied that the impacts to the surrounding road network as a result of the proposal are acceptable, and that the increase to traffic levels (and hence the traffic caps) can be managed to within acceptable environmental limits subject to a combination of commitments made by PKPC and Cement Australia and the recommended conditions of approval.

 Consideration of whether the conditions should provide some additional flexibility in relation to truck movements, to avoid the need for further amendments to concept plan with subsequent project applications.

The Department is conscious that the right balance needs to be struck so the traffic caps in the concept plan do not stymie the ongoing development of the outer harbour but still put pressure on PKPC to meet its target modal splits. It is the Department's view that providing additional flexibility in these caps at this stage would act as a disincentive for PKPC to provide rail infrastructure and intermodal capacity to service the Outer Harbour, and ultimately meet these target modal splits.

There is capacity within the modified caps to allow a further 40 truck movements per hour (i.e. the difference between the Cement Australia and the Stage 1 projects and the Outer Harbour Development as a whole). PKPC, as Proponent of the ongoing development within the outer harbour, needs to carefully manage and monitor its truck movements to ensure that these traffic caps are not exceeded and remain relevant.

Furthermore, when PKPC makes decisions about which operators it seeks to use the berths that are being delivered as part of the outer harbour development, it will need to be mindful that the type and volume of freight that would be handled by these operators is consistent with the original assumptions that were made for the outer harbour as a whole because this is the basis on which the traffic caps were calculated (see answer to question 1 above). Having sald this, PKPC has already given indications to the Department that their focus will be on attracting more logistics (rail orientated) facilities to the Outer Harbour development.

The Department is unlikely to support any further amendments to these traffic caps without clear commitments and more specific timeframes for when necessary road upgrades would be

carried out. As a result, should PKPC choose to allow operators in the outer harbour that generate more truck movements than have been accounted for, the company runs the risk of using up the available capacity of the traffic cap set for the concept plan before being permitted to develop the whole of the concept plan area.

Any future development in the outer harbour will require development consent/s from the Minister or Wollongong Council and would be subject to a rigorous and transparent assessment process. The application/s will need to clearly demonstrate that there is sufficient capacity available in the concept plan cap to facilitate the type of development proposed. If this was not the case, and a further application was made by PKPC to adjust the traffic cap again in the future, there would need to be strong justification to overcome the Department's reluctance to further modify the concept plan cap. Such justification may be in the form of specific commitments to major intersection upgrades.

Consideration of whether additional mechanisms could be included in the Project Approval
to put pressure on the Proponent to meet modal split provisions in the future. For example
whether there could be a time limit linked to the truck movements conditions.

In essence, it is PKPC's responsibility to ensure the delivery of rail Infrastructure and intermodal capacity and to meet the modal split provisions. As noted above, the Department considers there to be enough flexibility in the caps for the outer harbour and that it would be unreasonable to impose any additional mechanisms in the project approval to put pressure on Cement Australia to meet these target modal splits, because it is not the company's responsibility.

However, whilst the Department accepts at this stage it is not viable for Cement Australia to use rail transportation for this project at this time, it has recommended a condition (Condition 22 of Schedule 3) requiring Cement Australia to report on the potential for it to utilise the mode share of product transported by rail, prior to commencement of operations (estimated to be in about 18 month's time based on the current construction schedule).

This condition provides the Department and other transport-related Government Agencies with an opportunity to reassess whether rail utilisation is a viable option at this stage. By this time, a number of related studies and plans would have been completed and can be taken into account, including PKPC's Rail Master Plan.

Notwithstanding, after further consideration of the PAC's question, the Department suggests that this condition could be strengthened to better reflect the Government's commitment to maximising rail transportation. Condition 22 of Schedule 3 of the project approval has been redrafted to reflect these changes and it is set out below for the PAC's consideration:

Rail Feasibility Report

- The Proponent must commission a rail feasibility report to the satisfaction of the Director General. The report must:
 - (a) be prepared by a suitably experienced and independent expert whose appointment has been endorsed by the Director General;
 - (b) be submitted to the Director General for approval prior to commencement of operations;
 - (c) be prepared in consultation with Transport NSW, RailCorp. the RTA and PKPC;
 - (d) assess the economical, logistical and operational feasibility of the project utilising the rail network to receive raw meterials and transport products to its customers;
 - include consideration of all relevant national and state freight and port strategies and studies, including the Maldon to Domberton Feasibility Study;
 - (f) include consideration of any relevant documents prepared by PKPC for the Outer Harbour Development including the Rail Master Plan; and
 - (g) recommend whether or not the existing rail network is capable of being utilised by the Proponent to operate the project, and if possible, at what time.

 Justification for the assumption that rail haulage for less than 200km is not economical. It is not clear whether this assumption takes account of undesirable externalities of increased road transport.

As requested, Cement Australia has provided the Department with additional justification and financial modelling justifying why using rail haulage for less than 200km is financially uneconomical. However, the Department has been informed that this information is based on internal pricing and commercial arrangements for service providers and it is commercial-inconfidence. This information will be provided to the PAC under separate cover.

As noted above, this detailed information will be closely reconsidered as part of the Rail Feasibility Report before Cement Australia is permitted to commence its operations.

6. Is it intended at Concept Plan approval condition 2.23(e) that actual air quality impacts specific to the Outer Harbour Development will be identified and measured? If so, is this feasible, given the presence of other substantial sources of air pollution in the near vicinity of the Development? A similar question arises in relation to the Cement Grinding Mill (CGM) approval condition 30(c).

The intent of these and other conditions in the existing and draft approvals relating to air quality is for PKPC and Cement Australia to develop a system to monitor and manage dust emissions from the operations being carried out in the outer harbour.

The Department acknowledges that there are other sources of air pollution in the vicinity. However, provided that air quality monitors are appropriately located and that there are specific management measures in place (to be established through the project-specific air quality management plans and the cumulative impact protocol), the Department is confident that dust emissions from these projects can be effectively monitored and managed.

Notwithstanding this, the Department agrees that the wording of Condition 30(c) could be perceived as being slightly ambiguous and recommends that the words "to confirm the findings of the Air Quality Impact Assessment included in the EA" are replaced with "to ensure that dust emissions are no greater than predicted in the EA".

7. How will adour "monitoring" be undertaken in accordance with the Concept Plan approval condition 4.3(iii), given that instrumentation for ambient monitoring adour is unproven compared to other forms of air pollution? Would "assessment" be a better term, specifically in the case of adours?

Odour was considered a potential pollutant of concern in terms of nuisance effects during the dredging operations of the outer harbour. The Department considers that odour monitoring can be undertaken and is aware of other projects where monitoring has been undertaken, such as the dredging of the Hunter River, where odour monitoring was undertaken using a Nasal Ranger. Using a Nasal Ranger, odour monitoring was undertaken at locations around the site's perimeter to determine if odour was detectable. This project had significant potential to cause offensive odour, but has recently been successfully completed.

In the case of the Cement Australia project, the air quality assessment found that odour would not be an issue of concern or pose an environmental risk so no specific management and monitoring measures are proposed.

8. The following comment on p22 of the CGM report (section 5.2) is of concern to the Commission: "It is also worth noting that the background level was estimated to be 49.8ug/m³ and the project contribution was just 1.5ug/m³ (less than 3% of the OEH criteria of 50ug/m³)". This comment appears to miss the important point that when the margin between the existing ('background') concentration of air pollutant and the limiting environmental concentration is small, then even very small increments become important. In the case cited, the development leaves effectively no room for additional planned activities within the development, even those with relatively low levels of air pollution emissions. A better mechanism for allocating this small environmental margin needs to be worked out to realise effective planning for future developments in the Outer Harbour. A similar approach could be applied to management of cumulative impacts from traffic, as raised above.

The Department's assessment found that all of the long-term (annual) air quality criteria would easily be met. However, it was also found that there would be some small exceedances of the short term PM₁₀ (24-hour) criteria when background concentrations of dust are elevated, but that the contribution of dust from the project would be negligible in this context. The Department is satisfied that the air quality modelling undertaken for the project is conservative and that Cement Australia has applied all reasonable and feasible management and mitigation measures in this case.

PKPC will need to carefully monitor and manage dust emissions generated by both its own development, in conjunction with all other operators located within this development, to ensure that the overall level of dust being emitted from the outer harbour does not exceed predicted levels.

The Department acknowledges that existing (background) concentrations of dust are sometimes elevated in this area. However, the Department also notes that several significant manufacturing facilities in the area have closed, or have announced closures that may actually lead to improvements in the region's airshed.

Notwithstanding, any future operators that wish to locate in the outer harbour will be required to prepare an air quality assessment to show its contribution to overall dust emissions in the context of applicable air quality criteria and will have to demonstrate that it has adopted all reasonable and feasible management and mitigation measures to minimise its emissions. The outcomes of this assessment will be considered by both the Department and OEH on its merits at that time and a decision will be made on whether the operator in question is permitted to be located there. It may be that there is a limit on how many heavy dust-generating industries are permitted to operate in the outer harbour depending on the findings of future air quality assessments.

The OEH also has the option of placing Pollution Reduction Programs (PRPs) on all industry and port-related operators in this area that hold Environmental Protection Licences (EPLs) at their premises if it was considered that there was a regional air quality Issue. It may be prudent if the problem increases, for OEH to enforce PRPs on other licenced developments in the area.

As previously discussed with Members of the PAC, the Department accepts that there is inherent difficulties in how to approach air quality management in an equitable and rational manner in certain areas such as in this Instance where background concentrations are at or are approaching capacity. In this case, it is considered that PKPC should be responsible for determining how it allocates the available capacity of the air shed in the outer harbour area. PKPC needs to be mindful of the dust-generating potential of the industries that it seeks to locate in the outer harbour and how this will affect the remaining capacity of the airshed. To this end, PKPC has already indicated that they will be pursuing more logistics operators for the Outer Harbour development.

Furthermore, Modification 2.29 in Schedule 3 of the outer harbour concept approval requires PKPC to 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, including air quality, and needs to be developed before the Cement Australia project becomes operational. PKPC could choose to develop mechanisms through this protocol to find a more rational and equitable way of allocating the available air shed capacity.

An assessment of exposure to hexavalent chromium and any other relevant toxic materials
is needed to supplement the air quality assessment for the CGM.

The Department requested an additional assessment of exposure to relevant toxic materials to supplement the original air quality assessment from Cement Australia's air quality consultant.

It was found that at the nearest receivers:

- the maximum 24-hour average hexavalent chromium concentration would represent just 0.09% of the applicable criterion; and
- the maximum 24-hour average crystalline silica concentration would represent just 0.61% of the applicable criterion.

In summary, there would be a negligible exposure to relevant toxic chemicals and that no additional management or mitigation measures are considered necessary.

10. Is it intended to recover stag material for the CGM from previous emplacements of stag from the steelworks in the Illawarra region?

Cement Australia proposes to source Granulated Blast Furnace Slag (GBFS) from Australian Steel Mill Suppliers (ASMS). ASMS was formed in 1989 to service the slag-handling contract at BlueScope Steel, Port Kembla. They are contracted to collect and treat molten slag from blast furnaces and the steel making processes. ASMS would supply GBFS from 'Area 21', owned by Bluescope Steel.

Area 21 is located on Springhill Road. There are stockpiles of the product is this location and this is where the GBFS will be sourced to supply the grinding mill. The Department understands that all stockpiles are active in the sense that they are commodity of ASMS, and are available to all clients of ASMS, including Cement Australia.

Further, advice from Senior Management of Cement Australia confirms that the GBFS would specifically originate from BlueScope Steel's Blast Furnace No 5. Blast Furnace No 5 will remain fully operational and does not form part of the BlueScope Steel closures that have recently been reported in the media, and as such, there is no prospective product shortage.

11. Will there be a visible steam plume from the CGM?

Cement Australia has indicated that a visible steam plume may extend about 10 metres upwards when GBFS is processed. However, this would only occur when certain ambient air temperature conditions are present and would not be static or constant. For these reasons, the visual impact of these steam plumes is considered indistinguishable in the context of the highly industrialised nature of the area.

Should you have any questions on the above, please contact Ms Felicity Greenway on the above details.

Yours sincerely

Chris Wilson

Executive Director

5.9.11

Attachment 2

Modification of Minister's Approval Concept Plan for Outer Harbour, Port Kembla

Modification of Minister's Approval Stage 1 of the Outer Harbour Development

Project Approval
Cement Grinding Mill Project

Modification of Minister's Approval

Section 75W of the Environmental Planning & Assessment Act 1979

As delegate of the Minister for Planning and Infrastructure, the Planning Assessment Commission of New South Wales (the Commission) approves the modification of the concept plan referred to in Schedule 1, subject to the conditions in Schedule 2.

Janet Thomson Member of the Commission John Court Member of the Commission

Sydney

8 September 2011

SCHEDULE 1

Concept Plan Approval:

08_0249 granted by the Minister for Planning on 3

March 2011

For the following:

The staged development of the land in the Port Kembla

Outer Harbour, Port Kembla.

Modification:

(08_0249 MOD 1): adjustment of the operational traffic

movement cap for Stage 1and the entire Concept Plan

area of the Outer Harbour development.

SCHEDULE 2

CONDITIONS

1. In the Proposal section of Schedule 1, delete the words "three stages as follows: <u>Stage 1</u>" and insert:

three key stages as follows:

Stage 1 (1A, 1B and 1C)

2. In the Proposal section of Schedule 1, immediately after "civil works for construction of terminal facilities including services." insert:

Stage 1 (Cement Australia Grinding Mill)

- establishment of a processing plant including transfer hoppers, storage bins, grinding mill and storage silos for dispatch;
- a materials transfer system, incorporating extensive covered and closed conveyor systems, transfer chutes, dust suppression system and bag house;
- clinker storage shed;
- truck and ship loading and unloading facilities;
- internal road systems and parking;
- temporary covered stockpile for raw product; and
- associated office amenities, workshop and substation.

Note: The Cement Australia Grinding Mill is subject to its own project approval (10_0102), which includes a number of monitoring and reporting requirements which are the responsibility of Cement Australia.

 Delete the definitions for "DECCW", "NOW", "Department", "Director-General" and "Minister" and insert in alphabetical order the following:

CGM

Cement Australia Grinding Mill Project (10 0102)

Department

Department of Planning and Infrastructure

Director-General Director-General of the Department of Planning and Infrastructure (or

delegate)

DPI

Department of Primary Industries

Minister

Minister for Planning and Infrastructure

OEH

Office of Environment and Heritage

- 4. Delete all references to "DECCW" and replace with "OEH".
- 5. Delete all references to "Department (Heritage Branch)" and replace with "OEH".
- 6. Delete all references to "NOW", and replace with "DPI".
- 7. In Requirement 1.1 of Schedule 2, delete all words after "27 October 2010;" and insert:
 - (d) modification application 08_0249C MOD 1, cover letter dated 4 May 2011 and the accompanying Traffic Impact Assessment titled: *Port Kembla Grinding Mill Traffic Impact Assessment*, dated 21 January 2011; and
 - (e) the terms of this approval.
- 5. In Requirement 1.5 of Schedule 2 immediately after "Schedule 1 to this approval" insert "(including Stages 1A, 1B, 1C and Cement Australia Grinding Mill)".
- 6. Delete Requirement 2.3 of Schedule 3 and the accompanying note.
- 7. In Requirement 2.4 of Schedule 3, delete the text in point b) and insert:

road traffic generation, is generally consistent with the forecast levels contained in Requirement 2.7.

- 8. In Requirement 2.5 of Schedule 3, delete subsection (a) and insert:
 - 2.5(a) demonstration that the project is generally consistent with the requirements of this approval, the scope and intent of the concept plan outlined in the documents under requirement 1.1 of this approval, and that the project will not unduly impact on the ability of the site and future development to meet acceptable environmental limits.
- In Requirement 2.6 of Schedule 3, delete "and the road volume limits set under condition 2.7 and Table 4.4 of Appendix I (Volume 6) of the Environmental Assessment" and insert: "set out in Table 4.4 of Appendix I (Volume 6) of the EA and the road volume limits set under requirement 2.7"
- 10. In Requirement 2.7 of Schedule 3, delete the last two rows of Table 1 and insert:

Total for Stage 1	70 vehicle movements per hour (62 trucks + 8 employees)
Total for Concept Plan	121 vehicle movements per hour (102 trucks + 19 employees)
associated with the Stage the volumes and truck mo	oncept Plan totals in Table 1, include the 42 truck movements 1 (Cement Australia Grinding Mill) Project (10_0102). However, ovements for the 'Bulk', 'General' and 'Container' values do not c associated with the Stage 1 (Cement Australia Grinding Mill)

- 11. In Requirement 2.8 of Schedule 3 after the words "concept plan approval," insert "including the CGM,".
- 12. In Requirement 2.19 of Schedule 3 after the words "each stage of the project" insert "as relevant".
- 13. In Requirement 2.20 of Schedule 3 delete "The Proponent shall design, construct, and operate any projects associated with this concept plan approval" and replace with:
 - Projects associated with this concept plan approval shall be designed and operated
- 14. In Requirement 2.24 of Schedule 3 delete "The Proponent shall design and operate any projects associated with this concept plan approval" and replace with:
 - Projects associated with this concept plan approval shall be designed and operated
- 15. In Requirement 2.25 b) of Schedule 3 delete the words "and project specific".
- 16. Replace Requirements 2.27 and 2.28 with:
 - 2.27 For each project associated with this concept plan approval, the recommendations listed in section 13.4.1 of the Environmental Assessment shall be implemented, as relevant; and shall incorporate the proposed safeguards listed in Appendix A of the report Port Kembla Outer Harbour Development Preliminary Hazard Analysis, dated 4 March 2010.
 - 2.28 Twelve months after the commencement of operations of each project associated with this concept plan approval and every three years thereafter, or as otherwise agreed by the Director-General, a comprehensive Hazard Audit of the project, as relevant, shall be carried out.

The audits shall be carried out at by a qualified person or team, independent of the project, and shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.

The Proponent shall ensure that audit reports are submitted to the Director General within one month of each audit being undertaken and ensure that the three yearly site Hazard Audits for each project associated with this concept plan approval are consolidated.

- 17. In Requirement 2.29 after the words "Prior to commencement of construction of" insert "stage 1 (Cement Australia Grinding Mill),".
- 18. In Requirement 2.29 delete all words after "identified to be high risk;" and replace with:
 - c) management procedures to allow for the cooperation between project Environmental Representatives;
 - d) procedures for periodic review of the Protocol.
- 19. Delete Requirement 3.1 of Schedule 3.
- 20. Replace Requirements 4.1 to 4.3 of Schedule 3 with:
 - 4.1 Subject to confidentiality, the Proponent shall make documents required under this concept plan approval available for public inspection on request.

Provision of Electronic Information

- 4.2 The Proponent shall establish a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with the concept plan approval, subject to confidentiality requirements. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
 - a) information on the statutory context of the concept plan approval and the current implementation status of the project;
 - b) a copy of this concept plan approval, any related project approvals and any future modification to these approvals; and
 - c) details of the outcomes of compliance reviews and audits of the project.

Community Communication Strategy

- 4.3 The Proponent shall prepare and implement a Community Communication Strategy for the project. This Strategy shall be designed to provide mechanisms to facilitate communication between the Proponent, Council and the local community (broader and local stakeholders) on the progress of the project. The Strategy shall include, but not necessarily limited to:
 - a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;
 - b) procedures and mechanisms for the regular distribution of information to stakeholders on the progress of the project;
 - c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Proponent in relation to the progress of the project:
 - d) procedures and mechanisms through which the Proponent can respond to any enquiries or feedback from stakeholders in relation to the progress of the project; and
 - e) procedures and mechanisms that would be implemented to resolve any issues/disputes that may arise between parties on the matters relating to the progress of the project. This may include the use of an appropriately qualified and experienced independent mediator.

Key issues that should be addressed in the Community Communication Strategy include (but not necessarily be limited to):

- i) transport and traffic monitoring and management;
- ii) noise and vibration monitoring and management:
- iii) air quality and odour monitoring and management;
- iv) heritage; and
- v) cumulative impacts.

The Proponent shall maintain and implement the Strategy throughout the development of the concept plan. The Strategy shall be submitted to the Director General prior to the commencement of any construction of the projects associated with this concept plan approval.

21. Replace Requirement 5.1 of Schedule 3 with:

- 5.1 The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this concept plan approval. The Program shall be submitted to the Director General for approval prior to the commencement of construction of any project associated with this concept plan approval, unless otherwise agreed by the Director General. The Program shall include, but not necessarily limited to:
 - a) provisions for periodic review of the compliance status of the project against the requirements of this approval;
 - b) provisions for the notification of the Director General following the determination of, prior to the commencement of construction and prior to the commencement of operation of projects associated with this concept plan approval;
 - provisions for periodic reporting of environmental monitoring and compliance status to the Director General;
 - a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing; and
 - e) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance.
- 22. Delete section 6 of Schedule 3 (Requirements 6.1 to 6.4).

End of Schedule

Modification of Minister's Approval

Section 75W of the Environmental Planning & Assessment Act 1979

As delegate of the Minister for Planning and Infrastructure, the Planning Assessment Commission of New South Wales (the Commission) approves the modification of the project approval referred to in Schedule 1, subject to the conditions in Schedule 2.

Janet Thomson

Member of the Commission

John Court Member of the Commission

Sydney

8 September 2011

SCHEDULE 1

Project Approval:

08_0249 granted by the Minister for Planning on 3

March 2011

For the following:

Stage 1 of the Port Kembla Outer Harbour Development

Project, including associated infrastructure.

Modification:

(08_0249 MOD 1): adjustment of the operational traffic movement cap for Stage 1(1A, 1B and 1C) of the Outer

Harbour development.

SCHEDULE 2 CONDITIONS

- 1. In the Project section of Schedule 1, immediately after "Stage 1" insert "(1A, 1B and 1C)".
- 2. Delete the definitions for "DECCW", "NOW", "Department", "Director-General" and "Minister" and insert in alphabetical order the following:

Department

Department of Planning and Infrastructure

Director-General

Director-General of the Department of Planning and Infrastructure

Minister

Department of Primary Industries

Minister

Minister for Planning and Infrastructure

OEH

Office of Environment and Heritage

- 3. Delete all references to "DECCW" and replace with "OEH",
- 4. Delete all references to "NOW", and replace with "DPI".
- 5. In Condition B3. of Schedule 2 Part B delete the words "29 vehicles per hour/day" and replace with "shall not exceed 27 vehicle movements per hour/day".
- 6. In Condition B3. of Schedule 2 Part B delete the words "concept plan approval 08_0249" and insert "condition B42".
- 7. After Condition B38, of Schedule 2 Part B insert:

COMMUNITY INFORMATION

- B1. Prior to the commencement of construction, the Proponent shall establish a dedicated website or maintain dedicated pages within an existing website for the provision of electronic information associated with the project approval, subject to confidentiality requirements. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:
 - a) information on the statutory context of the project approval and the current implementation status of the project;
 - b) a copy of this approval and any future modification to this approval;
 - c) a copy of each relevant approval, licence or permit required and obtained in relation to the project; and
 - d) details of the outcomes of compliance reviews and audits of the project.

Nothing in this approval prevents the Proponent using or modifying the website required under concept plan approval 08_0249 for the purposes of this condition.

- B2. Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.
- B3. Prior to the commencement of construction, the Proponent shall ensure that a Complaints and Enquiries Procedure is established consistent with the Procedure required under concept plan approval 08_0249. The Complaints and Enquires Procedure shall facilitate contact between the Environmental Representative and the community, where relevant. Nothing in this approval prevents the Proponent from using or modifying the Procedure required under concept plan approval 08_0249 for the purposes of this condition.

COMPLIANCE TRACKING

B4. The Proponent shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this project approval. The Program shall be submitted to the Director General for approval prior to the commencement of construction, unless otherwise agreed by the Director General. The Program shall relate to both construction and operational stages of the project, and shall include, but not necessarily limited to:

- a) provisions for periodic review of the compliance status of the project against the requirements of this approval and concept plan approval 08 0249 (as relevant);
- b) provisions for the notification of the Director General prior to the commencement of construction and prior to the commencement of operation;
- c) provisions for periodic reporting of environmental monitoring and compliance status to the Director General;
- d) a program for independent environmental auditing in accordance with ISO 19011:2003 Guidelines for Quality and/ or Environmental Management Systems Auditing;
- e) mechanisms for recording incidents and actions taken in response to those incidents; and
- f) provisions for reporting environmental incidents to the Director General during construction and operation; and
- g) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance.

Nothing in this approval restricts the Proponent from using or modifying the Program required under concept plan approval 08 0249 for the purposes of this condition.

INCIDENT REPORTING

- B5. The Proponent shall notify the Director General of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 12 hours of becoming aware of the incident. The Proponent shall provide full written details of the incident, including demonstration that it has notified the appropriate owner of any assets which have been impacted from the incident, to the Director General within seven days of the date on which the incident occurred.
- B6. Where an incident involves an actual or potential fish kill, the Proponent shall also notify the OEH and DPI of the incident, consistent with the requirements of condition B5.
- B7. The Proponent shall maintain a register of accidents, incidents and potential incidents with actual or potential significant off-Site impacts on people or the biophysical environment. The register shall be made available for inspection at any time by the independent qualified person or team conducting the Environmental Audit and/or the Director General.
- B8. The Proponent shall meet the requirements of the Director General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition B5 of this approval, within such period as the Director General may require.
- 8. In Condition C31 of Schedule 2 Part B delete the words "concept plan approval" and replace with "condition B42".
- 9. After condition C.37 d) insert:

Environmental Representative

- C.38 Prior to the commencement of construction of the project, or as otherwise agreed by the Director General, the Proponent shall nominate for the approval of the Director General a suitably qualified and experienced Environmental Representative(s) independent of the design and construction personnel. The Proponent shall engage the Environmental Representative(s) during any construction activities, or as otherwise agreed by the Director General. The Environmental Representative(s) shall:
 - (a) oversee the implementation of all construction-related environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
 - (b) consider and advise the Proponent on its compliance obligations against all matters specified in the requirements of this approval, the documents referred to under term A.1 of this approval, and all other applicable permits, approvals and licences required and obtained in relation to the project;

- (c) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts associated with the construction of the project; and
- (d) have the authority to recommend to the Proponent cessation of activities if there is a significant risk that adverse environmental impacts are likely to occur.

End of Schedule

Project Approval

Section 75J of the Environmental Planning and Assessment Act 1979

As delegate for the Minister for Planning and Infrastructure, the Planning Assessment Commission of New South Wales (the Commission) approves the project referred to in Schedule 1, subject to the conditions in Schedules 2 to 4.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- · require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

Janet Thomson

Member of the Commission

John Court
Member of the Commission

Sydney

8 September 2011

SCHEDULE 1

Application Number:

10_0102

Proponent:

Cement Australia Pty Ltd

Approval Authority:

Minister for Planning and Infrastructure

Land:

Land to be reclaimed as part of the Outer Harbour Development Part of Lot 1/ DP 1141088 and Lot 140/ DP

1013971

Project:

Cement Australia Grinding Mill Project

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DEFINITIONS

BCA Building Code of Australia
Council Wollongong City Council

Construction The demolition of buildings or works, carrying out of work and

erection of buildings covered by this consent other than survey, fencing, investigative drilling or excavation, building/road dilapidation surveys, minor clearing, establishing ancillary facilities such as site compounds, minor adjustments to services/utilities, and piling

operations.

DA Development application

DA area Development Application area which includes all works described in

the DA

Day The period from 7am to 6pm on Monday to Saturday, and 8am to

6pm on Sundays and Public Holidays

Department Department of Planning and Infrastructure

Development The Cement Australia Grinding Mill and associated infrastructure

Director-General Director-General of the Department (or delegate)

DPI Department of Primary Industries

EA Environmental Assessment prepared by SitePlus for Cement

Australia Pty Ltd entitled Cement Australia Proposed Grinding Mill Facility Environmental Assessment, dated February 2011; and the

Response to Submissions, dated April 2011.

EP&A Act Environmental Planning and Assessment Act 1979

EP&A Regulation Environmental Planning and Assessment Regulation 2000

EPL Environment Protection Licence issued under the Protection of the

Environment Operations Act 1997

Evening The period from 6pm to 10pm

GGBFS Granulated ground blast furnace slag

Land means the whole of a lot, or contiguous lots owned by the

same landowner, in a current plan registered at the Land Titles

Office at the date of this consent

Minister Minister for Planning and Infrastructure (or delegate)

Night The period from 10pm to 7am on Monday to Saturday, and 10pm to

8am on Sundays and Public Holidays

PKPC Port Kembla Ports Corporation

Proponent Cement Australia Pty Ltd, or its successors

Reasonable and Feasible Reasonable relates to the application of judgement in arriving at a

decision taking into account the development as approved, mitigation benefits, costs of mitigation versus benefits provided, community views and the nature and extent of potential improvements. Feasible relates to engineering considerations on

what is practical to build.

RTS Response to Submissions document

Site Land to which the development application applies

Statement of Commitments The Applicant's commitments in the EA (see Appendix B)

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

 The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or decommissioning of the project.

Terms of Approval

- 2. The Proponent shall carry out the project generally in accordance with the:
 - (a) EA
 - (b) site plans 10191-1-5S22revP12; 10191-1-5S23revP9; Admin Building Elevations A; 10105.CO1; and 10105.C02 (see Appendix A);
 - (c) RTS and associated information;
 - (d) statement of commitments (see Appendix B); and
 - (e) conditions of this approval.
- 3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- 4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence submitted by the Proponent.
- 5. Production shall be limited to:
 - (a) 800,000 tonnes of cement per annum; and
 - (b) 300,000 tonnes of granulated ground blast furnace slag (GGBFS) per annum.

Liability to Lapse

6. This approval shall lapse if the Proponent does not physically commence the proposed development associated with this approval within 5 years of the date of this approval.

Management Plans/Monitoring Programs

7. With the approval of the Director-General, the Proponent may submit any management plan or monitoring program required by this approval on a progressive basis.

Structural Adequacy

8. The Proponent shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

Protection of Public Infrastructure

- 9. Prior to the commencement of construction, the Proponent shall:
 - (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths, etc) having consulted with RTA and Council; and
 - (b) submit a copy of this report to the Director-General, RTA and Council.
- 10. The Proponent shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

Service Providers/Additional Approvals

11. Prior to the construction of utility works, the Proponent shall obtain all relevant approvals from service providers.

Operation of Plant and Equipment

- 12. The Proponent shall ensure that all plant and equipment used for the Project is:
 - (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

End of Schedule 2

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

SOIL AND WATER

Site Suitability

13. Prior to the commencement of construction, the Proponent shall provide a site auditor's statement to the Director-General confirming that the site is suitable for the proposed uses.

Discharge Limits

14. The Proponent shall comply with Section 120 of the *Protection of the Environment Operations*Act 1997.

Bunding

15. In accordance with relevant Australian Standards and OEH's Storing and Handling Liquids: Environmental Protection manual, all chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund.

Management

- 16. The Proponent shall prepare and implement a Stormwater and Drainage Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - (a) be submitted to the Director-General for approval at least one month prior to the completion of the stormwater and drainage system;
 - (b) be prepared in consultation with Council;
 - be prepared in accordance with OEH's *Managing Urban Stormwater* guidelines and the Outer Harbour Development Concept Plan (08_0249) and Stage 1 Project (08_0249) if relevant:
 - (d) include a stormwater drainage plan, including hydraulic calculations based on a 1 in 100 ARI:
 - (e) include detailed plans of the proposed stormwater, treatment and control infrastructure, and any stormwater outlets into a riparian zone or natural watercourse and their spillways;
 - (f) detail measures to ensure that stormwater systems are designed and built to minimise pollutant discharges to reviewing waterways;
 - (g) include a program to monitor stormwater quantity and quality; and
 - (h) describe the measures that would be implemented to maintain this infrastructure during the life of the project.

TRANSPORT

Internal Roads, Queuing and Parking

- 17. The Proponent shall ensure that:
 - (a) all internal roads, access, and parking on site complies with AS2890.1:2004 and AS2890.2:2002, or their latest versions;
 - (b) a disabled parking space is provided on-site;
 - (c) all vehicles are to enter the site in a forward direction;
 - (d) all vehicles are to be wholly contained on site before being required to stop;
 - (e) all parking generated by the project is accommodated on site, and that no vehicles associated with the project shall park on the public road system at any stage; and
 - (f) that the project does not result in any vehicles queuing on the public road network.

Bicycle Racks

 The Proponent shall provide parking for bicycles and associated facilities such as change rooms.

Traffic Movements

19. The Proponent shall ensure that operational truck movements comply with the restrictions in Table 1

Table 1: Operational Traffic Generation

Vehicle Type	Daily	Peak Hour
Raw Material Trucks (5am - 6pm)	280	22
Dispatch Trucks (24 hour)	464	20
Total	744	42

- 20. The Proponent shall:
 - (a) keep accurate records of:
 - amount of cement and GGBFS transported from the site (on a monthly basis);
 - the date and time of each truck movement from the site; and
 - make these records available in its Annual Report.

Traffic Management

(b)

- 21. The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This Plan must:
 - (a) be prepared in consultation with Council and RTA, and be approved by the Director-General prior to commencement of operations;
 - (b) detail operational traffic management measures including a driver code of conduct and truck route management plan, consistent with any relevant plans prepared for the Outer Harbour Development;
 - (c) detail measures to reduce impacts during peak hour traffic;
 - include a plan showing that the swept path of the longest vehicle entering and exiting the subject site, as well as manoeuvrability through the site, is developed in accordance with AUSTROADS guidelines;
 - (e) detail procedures to ensure site-related vehicles do not queue or park on public roads.

Rail Feasibility Report

- 22. The Proponent must commission a rail feasibility report to the satisfaction of the Director General. The report must:
 - (a) be prepared by a suitably experienced and independent expert whose appointment has been endorsed by the Director General;
 - (b) be submitted to the Director General for approval prior to commencement of operations;
 - (c) be prepared in consultation with Transport NSW, RailCorp, the RTA and PKPC;
 - (d) assess the economical, logistical and operational feasibility of the project utilising the rail network to receive raw materials and transport products to its customers and taking account of externalities such as impacts and costs on other road users and the environment:
 - (e) include consideration of all relevant national and state freight and port strategies and studies, including the Maldon to Dombarton Feasibility Study;
 - (f) include consideration of any relevant documents prepared by PKPC for the Outer Harbour Development including the Rail Master Plan; and
 - (g) recommend whether or not the existing rail network is capable of being utilised by the Proponent to operate the project, and if possible, at what time.

NOISE

23. The Proponent shall comply with the restrictions in Table 2, unless otherwise agreed by the Director-General.

Table 2: Construction and Operation Hours for the Project

Activity	Day	Time	
Construction	Monday – Friday	7:00am to 6:00pm	
	Saturday	8:00am to 1:00pm	
	Sunday and Public Holidays	Nil	
Operation	All days	24 hours	

Notes:

- Construction activities may be conducted outside the hours in Table 2 provided that the activities are not audible at any residence beyond the boundary of the site.
- 24. The Proponent shall ensure that the combined operational noise from the project does not exceed the noise limits presented in Table 3.

Table 3: Operational Noise Limits (dB(A))

Location	Day	Evening		Night
		L _{Aeq (15 min)}		L _{Aeq (1 min)} or L _{A max}
Residential Area 1 (Wentworth Road)	40	40	40	51
Residential Area 2 (O'Donnell Street)	37	37	37	48
Any other residential premises not nominated above	35	35	35	45

Notes:

- Noise emission limits apply under meteorological conditions of wind speeds up to 3 m/s at 10 metres above ground level or temperature inversions conditions of 3°C/100m and wind speed up to 2 m/s at 10 metres above the ground. To determine compliance with this condition, noise from the development must be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary.
- However, where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may
 accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors
 in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

Noise Verification Report and Management Plan

- 25. The Proponent shall submit a Noise Verification Report and Management Plan for the project, to the satisfaction of the Director-General. This report must:
 - (a) be submitted to the Director-General within 3 months following commencement of operations:
 - (b) be prepared by a suitably qualified acoustical consultant, in accordance with OEH's *Industrial Noise Policy*, and in consultation with OEH and Council;
 - (c) include a noise monitoring program to confirm the findings of the Noise Impact Assessment included in the EA:
 - (d) demonstrate compliance with the criteria in condition 21 of this approval;
 - detail what additional measures would be implemented to ensure compliance, if exceedances are recorded;
 - (f) detail additional measures that could be implemented to further reduce emissions.

Traffic Noise Management Plan

- 26. The Proponent shall prepare and implement a Traffic Noise Management Plan, to the satisfaction of the Director-General, prior to operations commencing. This plan must:
 - (a) be developed in consultation with OEH and RTA;
 - (b) include a Truck Noise Auditing Program; and

(c) identify, consider, and implement feasible and reasonable noise management strategies to achieve the highest noise emissions standards for vehicle movements associated with the project.

AIR QUALITY

Plant and Equipment

- 27. The Proponent shall ensure that all plant and equipment must be designed and installed to meet Group 6 limits under the *Protection of the Environment Operations Clean Air Regulation*.
- 28. The truck unloading hopper must be designed and installed with shutters to provide protection from the wind and minimise dust emissions.
- 29. The Proponent shall ensure that all raw materials used on-site must be stored within enclosed buildings.

Air Quality Verification Report and Management Plan

- 30. The Proponent shall submit an Air Quality Verification Report and Management Plan for the project to the satisfaction of the Director-General. This report must:
 - (a) be submitted to the Director-General within 3 months following commencement of operations;
 - (b) be prepared by a suitably qualified consultant, in accordance with OEH's Approved Methods for Sampling and Analysis of Air Pollutants in NSW, and in consultation with OEH and Council:
 - (c) include an air quality monitoring program to confirm the findings of the Air Quality Impact Assessment included in the EA;
 - (d) detail the mineralogy and chemistry of any particulates emitted form the plant;
 - (e) detail what additional measures would be implemented to ensure compliance, if exceedances are recorded; and
 - (f) detail additional measures that could be implemented to further reduce emissions.

ENERGY

Energy Management Plan

31. Prior to the commencement of operation, the Proponent shall prepare and implement an Energy Management Plan for the project to the satisfaction of the Director-General. This plan must include energy consumption levels, predicted energy savings and any potential measures to reduce energy consumption and greenhouse gas emissions in the long term.

WASTE

32. The Proponent shall ensure that all waste generated on the site during construction and operation is classified in accordance with the OEH's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* and disposed of to a facility that may lawfully accept the waste.

HAZARDS

- 33. The Proponent shall ensure that all dangerous goods and hazardous substances are stored and handled on site in accordance with the Dangerous Goods Code and AS 1940-2004: *The storage and handling of flammable and combustible liquids*.
- 34. The Proponent shall implement the safe guards/control mechanisms outlined in the *Preliminary Hazard Analysis: Rev B*, included in the EA and dated 24 September 2010, during the construction and operational phase of the project.

VISUAL

Signage

35. The Proponent shall not install any commercial signage on site without the written approval of the Director-General. In seeking this approval the Proponent shall submit detailed plans of the proposed signage, which have been prepared in consultation with Council.

Landscaping

- 36. Any proposed landscaping, fencing or signage is not to impede the desired sight lines of all road users including pedestrians and cyclists.
- 37. The Proponent shall submit a detailed Landscape Plan to the Director-General for approval, within 6 months following the commencement of construction works. The Plan must:
 - (a) be developed in consultation with Council; and
 - (b) be generally consistent with the Landscape Concept Plan LC01/03.

Lighting

- 38. The Proponent shall ensure that the lighting associated with the project:
 - (a) complies with the latest version of Australian Standard AS 4282(INT)-Control of Obtrusive Effects of Outdoor Lighting; and
 - (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

End of Schedule 3

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT REPORTING AND AUDITING

ENVIRONMENTAL REPRESENTATIVE

- 39. The Proponent shall nominate for the approval of the Director General a suitably qualified and experienced Environmental Representative(s) independent of the design and construction personnel, prior to construction works commencing. The Proponent shall engage the Environmental Representative(s) during any construction activities, or as otherwise agreed by the Director General. The Environmental Representative(s) shall:
 - (a) oversee the implementation of all construction-related environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
 - (b) liaise with the Environmental Representative(s) for the Outer Harbour Development with regard to any relevant site wide management plans and compliance obligations;
 - (c) consider and advise the Proponent on its compliance obligations against all matters specified in the requirements of this approval, relevant management plans and all other applicable permits, approvals and licences required and obtained in relation to the project;
 - (d) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts associated with the construction of the project; and
 - (e) have the authority to recommend to the Proponent cessation of activities if there is a significant risk that adverse environmental impacts are likely to occur.

ENVIRONMENTAL MANAGEMENT STRATEGY

- 40. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must be submitted to the Director-General prior to the commencement of operations, and shall:
 - (a) identify the statutory requirements that apply to the project;
 - (b) include a copy of the management plans and monitoring programs required in this approval;
 - (c) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - · receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - · respond to any non-compliances; and
 - · respond to emergencies;
 - (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project.

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- 41. Prior to the commencement of construction works associated with the project, the Proponent shall prepare and implement a comprehensive Construction Environmental Management Plan (CEMP). The CEMP shall:
 - (a) be submitted and approved by the Director-General prior to the commencement of site preparation works;
 - (b) include the following sub-plans:
 - Air and Dust Management Plan. The plan would outline the mitigation measures to control dust from exposed areas, stockpiles, plant and equipment and unsealed roads;
 - Waste Management Plan. The plan would include disposal requirements, measures to prevent the generation and measures to reduce, re-use or recycle waste where possible;
 - Soil and Water Management Plan. The plan must be prepared in accordance with the requirements in Landcom's Managing Urban Stormwater: Soils and Construction Manual (2004), and address how potential construction impacts to soil and water guality will be mitigated and managed during construction works;

- Traffic Management Plan. The plan will include truck movements to and from the site, interactions with the general public, parking and access requirements from construction and safety signage and training of personnel in traffic management.
- Noise and Vibration Management Plan. This plan must be prepared in consultation with OEH and must:
 - be consistent with the guidelines contained in the Interim Construction Noise Guidelines:
 - detail construction activities and a schedule of construction works, identifying those with the potential to result in noise impacts at surrounding sensitive receivers;
 - identify construction noise management levels for the development of the site;
 - detail how construction noise and vibration impacts would be minimised and managed;
 - detail procedures for notifying residents of construction activities that may have impacts and procedures for dealing with and responding to noise complaints; and
 - include a noise monitoring program for the construction period.
- 42. Subject to confidentiality, the Proponent shall provide all documents required under this approval to PKPC, to be made publically available.

ENVIRONMENTAL REPORTING

Incidents

- 43. Within 24 hours of detecting an exceedance of the limits/performance criteria in this approval or the occurrence of an incident that causes (or may cause) harm to the environment, the Proponent shall notify the Department and other relevant agencies of the exceedance/incident.
- 44. Within 6 days of notifying the Department and other relevant agencies of an exceedance/incident, the Proponent shall provide the Department and these agencies with a written report that:
 - (a) describes the date, time, and nature of the exceedance/incident;
 - (b) identifies the cause (or likely cause) of the exceedance/incident;
 - (c) describes what action has been taken to date; and
 - (d) describes the proposed measures to address the exceedance/incident.

Annual Reporting

- 45. The Applicant shall submit an Annual Report to the Director-General. This report must:
 - (a) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - (b) include a summary of the monitoring results obtained during the past year, and a comparison of these results against the relevant:
 - (c) impact assessment criteria/limits;
 - (d) monitoring results from previous years; and
 - (e) predictions in the EA;
 - (f) identify any trends in the monitoring results over the life of the development;
 - (g) identify any non-compliance during the previous year; and
 - (h) describe what actions were, or are being, taken to ensure compliance.

AUDITING

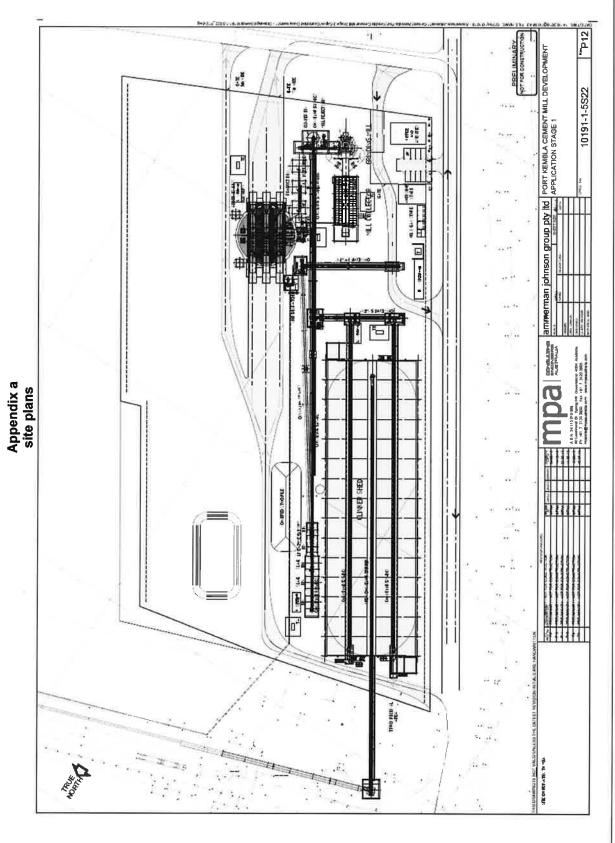
Pre-Operation Compliance Audit

46. Within one month of commencement operations, the Proponent shall submit work as executed plans to the Department for all the development associated with the project. These plans must be prepared by a suitably qualified and experienced expert, and include plans showing the work as executed plans laid over the approved plans to demonstrate that the development has been carried out in accordance with the approved plans.

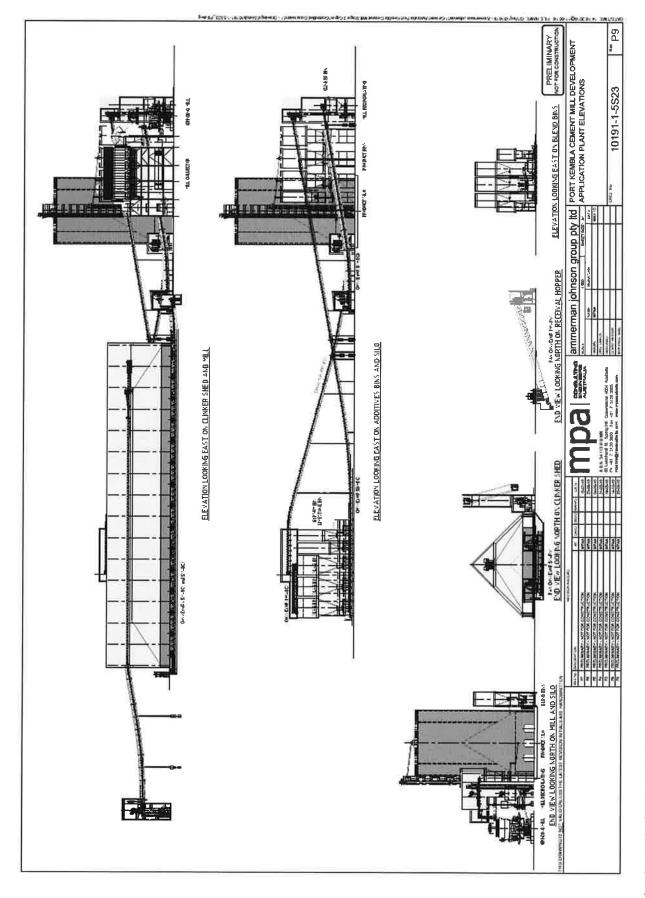
47. The Director-General may require an update on compliance with all, or any part, of the conditions of this approval. Any such update shall meet the reasonable requirements of the Director-General and be submitted within such period as the Director-General may agree.

Independent Environmental Audit

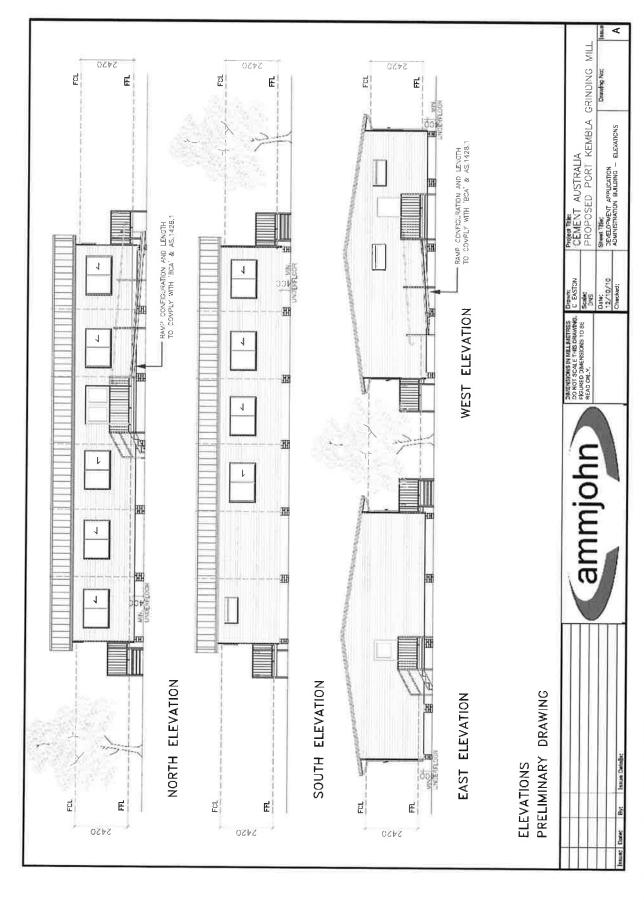
- 48. Within 12 months of the commencement of operations, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
 - (a) be conducted by a suitably qualified, experienced, and independent team of experts whose appointment has been endorsed by the Director-General;
 - (b) assess whether the project is being carried out in accordance with industry best practice;
 - (c) assess the environmental performance of the project, and its effects on the surrounding environment and sensitive receivers;
 - (d) assess whether the project is complying with the relevant standards, performance measures, and statutory requirements;
 - (e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary;
 - (f) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval; and
 - (g) include a program for the implementation of the recommendations made in the audit report with justification for any deferred implementation.
- 49. Within 1 month of completing this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General with a response to any recommendations contained in the audit report.
- 50. Within 3 months of submitting an audit report to the Director-General, the Proponent shall review and if necessary revise the strategy/plans/programs required under this approval to the satisfaction of the Director-General.



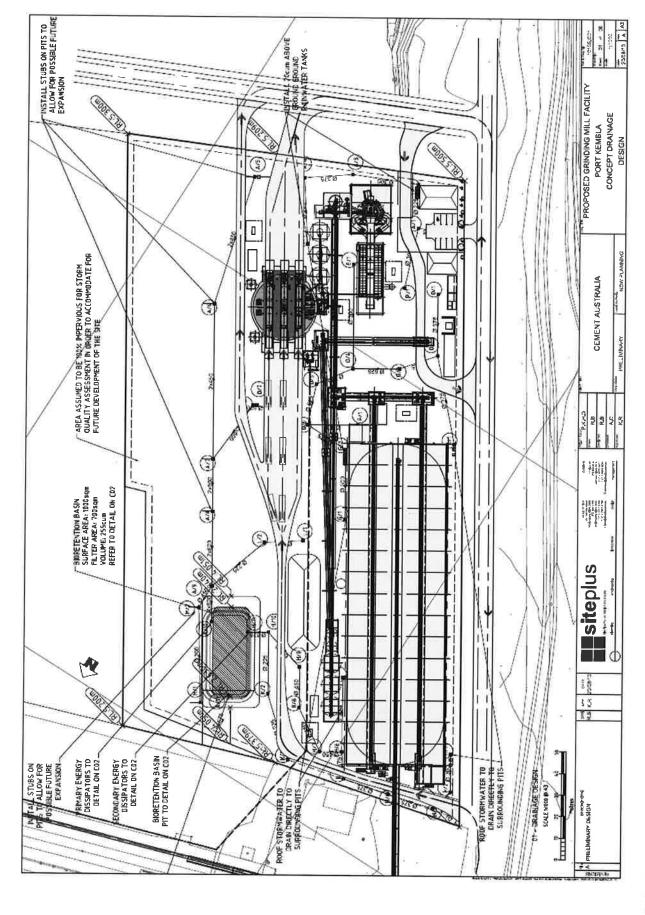
Project Approval - Cement Grinding Mill



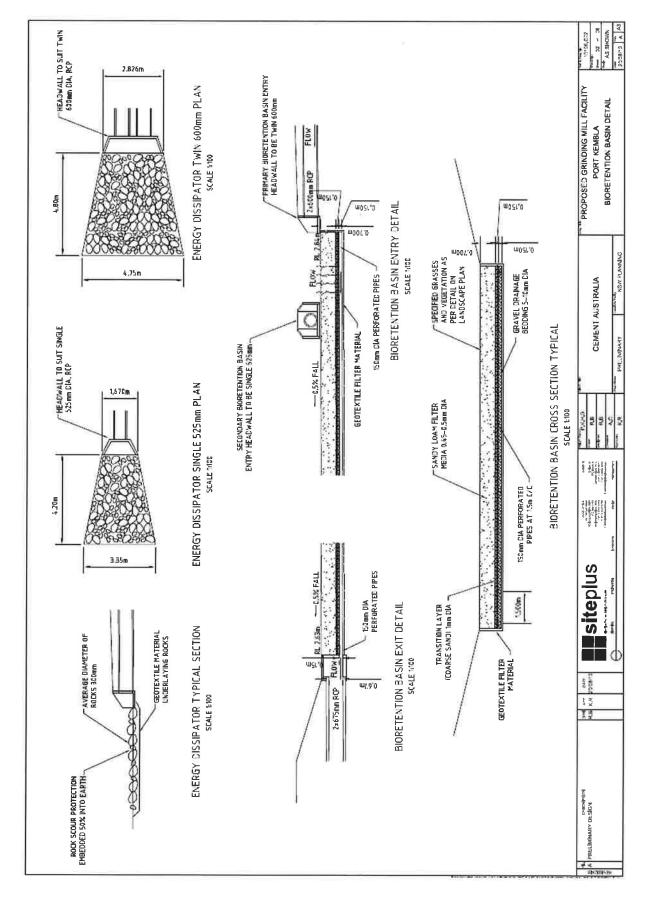
Project Approval - Cement Grinding Mill



Project Approval - Cement Grinding Mill



Project Approval - Cement Grinding Mill



Project Approval - Cement Grinding Mill

APPENDIX B STATEMENT OF COMMITMENTS

Statement of Comp	STATEMENT OF COMMITMENTS
Statement of Communication	Environmental Commitment
1. Statutory Commitment	1.1 Cement Australia will ensure that all statutory licences, permits and approvals are obtained and maintained for the project. Copies of all relevant licenses, permits and environmental approvals will be available on site at all times during the project.
	1.2 In response to NSW Office of Water (NOW) advice of 11 th March 2011, if groundwater is encountered on the site, advice will be sought from NOW to determine whether a license is required. The proponent has noted that if a license for temporary construction dewatering, this will be required prior to commencement of excavation.
	1.3 In response to Sydney Water advice of 15 th March 2011, an application for a Section 73 Certificate will be made as required.
2. Project Compliance	2.1 Cement Australia will establish a project specific induction program for employees, contractors and sub-contractors which will incorporate responsibilities under relevant statutory licences, permits and environmental approvals.
	2.2 Cement Australia will ensure that employees, contractors and sub-contractors are inducted in the project induction program prior to commencing work on the site.
	2.3 Cement Australia will comply with all conditions of consent as advised by DECCW in their letter dated 18 th March 2011.
3. Environmental Management and Reporting	3.1 Cement Australia will prepare and implement a suite of Environmental Management Plan (EMP) documents for the construction (CEMP) and operational (OEMP) phase of the project including:
	* Soils and Water Management Plan (SWMP)
	This plan will incorporate the issues arising from NSW Maritime submission dated 8 th March 2011. The Soil Erosion Control Plan will refer to DECCW and NOW requirements.
	* Stormwater Management Plan (STMP) This plan will incorporate the issues arising from NSW Maritime submission dated 8 th March 2011. This plan will also include the relevant issues arising out of the submission made by Wollongong City Council dated 23 March 2011 and subsequent advice dated 9 th May 2011. * Acid Sulfate Soil Management Plan (ASSMP)
	* Site Management Plan (SMP) * Hazardous Substance Management Plan (HSMP) * Emergency Response Plan (ERP)
	* Green and Golden Bell Frog Management Plan (GGBFMP) * Traffic Management Plan (TMP)
	* Noise and Vibration Management Plan (NVMP) * Air Quality Management Plan (AQMP) * Safety Management Plan (SFMP) * Landscape Management Plan (LMP) * Waste Management Plan (WMP)
4. Air Quality	4.1 Cement Australia will meet the emission limits for the GMF project outlined in the Conditions of Consent.
	4.2 The GMF project will be undertaken in a manner that minimises dust emissions from the site during construction and operation, including wind-blown and traffic generated dust (fugitive dust).

5. Hydrology & Water Quality

- 5.1 Cement Australia will ensure that hydrological and ecological considerations are taken into account in the stormwater design for the construction and operational stage. Water Sensitive Urban Design (WSUD) will be utilised wherever possible to reduce the volume, velocity and contaminants associated with stormwater runoff.
- 5.2 A Stormwater Management Plan (STMP) will be prepared and implemented to appropriately manage the accumulation of surface water from rainfall and storm events. The STMP will outline the management of surface water for operation and measures for treatment such as a first flush stormwater capture system and harvesting of water from roofs of buildings and other structures for reuse in landscaped areas, dust suppression etc. This plan will incorporate the relevant issues raised by PKPC in their letter dated 16th March 2011.

6. Noise & Vibration

- 6.1 Cement Australia will meet the noise limits for the GMF project outlined in the Conditions of Consent.
- 6.2 Cement Australia will prepare an Operational Noise and Vibration Management Plan (ONVMP) as part of the OEMP, prior to the commencement of the operation of the GMF.
- 6.3 Cement Australia will undertake an additional noise impact assessment, if it is found, after detailed design and operations planning, that the final operational scenario differs significantly from that used for modelling purposes in the Noise Impact Assessment prepared by Day Design dated August 2010.
- 6.4 Cement Australia will undertake an annual review of truck noise operations to ensure that all Cement Australia trucks are compliant with RTA requirements as outlined in their guidelines

http://www.rta.nsw.gov.au/heavyvehicles/reducingnoise.html

7. Contaminated Soils and Groundwater

Cement Australia will prepare a Site Management Plan (SMP) prior to commencement of construction to manage excavation works and to address the following:

- * Contamination "hotspots" based on visual observations and soil sample analysis if required.
- * Appropriate management of potential contamination including selected excavation characterisation and disposal.
- * Development of a groundwater monitoring program (including background monitoring and operational monitoring) to be conducted on site in accordance with the approved conditions of consent for the PKPC Outer Harbour Major Project (MP08-0249) and to the satisfaction of the NSW Office of Water.

8. Waste

- 8.1 Cement Australia will prepare and implement a Waste Management Plan (WMP) as part of the OEMP in accordance with the relevant NSW and Commonwealth Regulations and Guidelines. The WMP will include:
- * Appropriate general and hazardous waste identification, handling, storage, transportation, disposal and monitoring measures on site at all times.
- * Incoming vessels to the Gateway Jetty will comply with the Quarantine Act 1908 and comply with all requirements of the Australian Quarantine Inspection Service (AQIS).
- * The WMP will incorporate any requirements set out in the National Ballast Water Management Arrangements under the Australian National System for the Prevention and Management of Marine Pest Incursions.

9. Traffic

9.1 A Traffic Management Plan (TMP) will be implemented as part of the CEMP and OEMP. The TMP will address work practices on site, designated

haulage routes to and from the site, Driver Code of Conduct, hours of operation, financial penalties, amongst other measures. 9.2 In response to Port Kembla Port Corporation's response dated 16th March 2011, the TMP will have regard to opportunities to minimise impacts during peak hour traffic. 9.3 In confirmation of Wollongong City Council's (WCC) response dated 23rd March 2011 and 9th May 2011, a signage and lighting plan will be prepared. 9.4 In confirmation of Wollongong City Council's (WCC) response dated 23rd March 2011 and 9th May 2011 parking areas will be suitably sized and linemarked 10. Potential 10.1 Cement Australia will prepare an Emergency response Plan (ERP) in Hazards accordance with the HIPAP No1 Emergency Planning Guidelines as part of the OEMP for the site. 10.2 Cement Australia will prepare and implement a Hazardous Substance Management Plan (HSMP) as part of the OEMP that will outline appropriate measures to prevent and respond to spills and incidents. 11. Terrestrial 11.1 Cement Australia will minimise potential impacts on the threatened species and threatened species habitat of the Green and Golden Bell Frog Fauna (GGBF) during the construction and operation phase of the Project. If the GGBF is found on the Project site, Cement Australia will implement a GGBF Management Plan in consultation with a suitably qualified ecologist and the DECCW and in accordance with the approved GGBF Master Plan for the Port Kembla Outer Harbour area. 12. Landscape and 12.1 Cement Australia will ensure that the Landscape Plan includes **Visual Amenity** appropriate site specific measures and controls to mitigate potential visual impacts on the immediate, local and sub regional landscape including: * Selection of suitable robust plant species to substantially screen the site, once established, and ameliorate the visual appearance of the GMF. Selection of suitable colours and materials for the buildings, GMF, infrastructure and pavement areas to minimise reflectivity and contrast and ameliorate the visual impact of the development. * Lighting selection to minimise light spill on surrounding areas outside the site boundaries and minimise visual impact when viewed from adjacent premises. 12.2 The landscape plan will reflect the issues raised by Council where practicable and feasible as raised in their advice dated 23rd March 2011. 13. Service 13.1 In response to Sydney Water advice of 15th March 2011, sizes. configurations and connections will be designed to comply with all relevant Connection code compliance requirements.

This commitment is made under the authority of the undersigned, who is legally empowered to make this undertaking on behalf of the proponent, Cement Australia Pty Ltd ABN 75 104,053 474:

Signature:

Name:

Andrew Ward

Position:

General Manager – Strategic Business

Date:

7.6.11