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6 December 2013

The Honourable Brad Hazzard, MP
Minister for Planning and Infrastructure
Level 31 Governor Macquarie Tower
1 Farrer Place
SYDNEY NSW 2000

Mr Sam Haddad
Director General for the Department of Planning
and Infrastructure
GPO Box 39, Sydney NSW 2001

By Courier Delivery

Dear Minister

NEWCASTLE PORT CORPORATION - MODIFICATION OF CONCEPT PLAN APPROVAL

In July 2012, the Minister issued Newcastle Port Corporation (**NPC**) with a Concept Plan approval in respect of the port at Mayfield, Newcastle. NPC is proposing to modify the Concept Plan approval in accordance with section 75W(2) of the Environmental Planning and Assessment Act 1979 (the **Act**).

The purpose of this correspondence is:

(a) to provide information in relation to the nature of the proposed modifications to the Concept Plan approval that are being sought by NPC and the justification for these modifications; and

(b) to confirm that in our view and based on expert advice we have received, the proposed modifications can be considered under Sections 75W(2) because:

i. they are generally consistent with the terms of the existing Concept Plan Approval

ii. they are consistent with the original intent of the Concept Plan

iii. they will not result in any significant changes to the project as described in the Concept Plan approval

iv. they will have only limited environmental consequences beyond those that have been the subject of assessment.

Newcastle Port Corporation ABN 50 825 884 846
6 Newcomen Street (PO Box 663) Newcastle NSW 2300 Australia
Telephone: 02 4985 8222 **Toll Free NSW:** 1800 048 205 **Facsimile:** 02 4925 0600
Email: mail@newportcorp.com.au **Website:** www.newportcorp.com.au

Attached to this letter are the following documents:

1. Executive Summary
2. Overview of the Existing Environment
3. Strategic Development Plan for the Port of Newcastle 2013-2043
4. Existing Mayfield Concept Approval
5. Description of Proposed Modifications
6. Justification for Proposed Modifications
7. Environmental Assessment
8. Legal Considerations
9. The Concept Plan Approval (as modified)
10. Appendix A – Intent of the Mayfield Concept Plan Approval

Yours sincerely

Grant Gilfillan
CHIEF EXECUTIVE OFFICER

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1. EXECUTIVE SUMMARY

Context

The Newcastle Port Corporation **(NPC)** is the owner of the Mayfield site which is located approximately 7km north west of the Newcastle Central Business District (CBD). The site adjoins the South Arm of the Hunter River and has a total area of approximately 90 hectares.

The Mayfield site is strategically significant in the context of the Port of Newcastle given its size, significant deepwater river frontage to the South Arm of the Hunter River and accessibility to the existing arterial road and rail freight transport networks. The site has significant development potential and represents an excellent opportunity for future expansion of the port operations.

Concept Plan Approval

In July 2012, NPC was granted Concept Plan approval for development of a range of port related activities on the Mayfield site. The site was to be developed progressively in stages to accommodate future trade needs over a 20-25 year timeframe. The Concept Plan identified the arrangement of port related activities generally within five precincts. New road and rail infrastructure to service the development of these precincts was also proposed.

For the purposes of establishing acceptable environmental limits for the site, indicative estimates were provided of the forecast trade volumes for each precinct. These estimates were based on established NSW government policy, general market conditions at that time and NPC's best available knowledge regarding the types and volumes of trade over the extended timeframe for development of the Concept Plan.

As outlined in the original environmental assessment (AECOM 2010) for the Concept Plan, the trade volume estimates and the boundaries between the precincts were intended to be indicative only and thereby allow some reasonable degree of flexibility for future developments that may occur over the anticipated 20-25 year timeframe.

The Modification

NPC is seeking a modification of the Concept Plan approval to:

- Remove reference to prescriptive precinct or cargo based road and rail traffic limits and replace these with reference to overall road and rail traffic limits for the site

- Replace reference to developing maximum sound power levels for each precinct with development of an overall Site Noise Model which is a more sophisticated and robust method of assessing cumulative noise impacts

- Ensure the approval appropriately reflects the original intent of the Concept Plan, which was to allow reasonable flexibility for future development of the

site provided that the overall environmental limits established by the Concept Plan are not exceeded.

Justification

The need for the modification has arisen as a result of a recent process undertaken by NPC to engage interest from potential lessees who may wish to be involved in developing the Mayfield site. This has resulted in more current information being available regarding likely cargo types and volumes over the life of the Concept Plan development. This market information has been influenced by:

- A shift in NSW government policy regarding the strategic role of Newcastle Port, particularly in respect to containers
- Significant changes in market drivers relating to the NSW fuel supply chain
- Growth in global export demand for bulk commodities such as grain and cement products.

None of these circumstances were anticipated at the time the Concept Plan application was being prepared in 2010 and subsequently assessed.

As a result it is now likely that development of the Mayfield site will involve a significant decrease in container trade volumes and an increase in bulk liquid fuel and bulk material trade volumes by comparison to those assessed in the Concept Plan environmental assessment. On this basis NPC considers that it is appropriate to remove the artificial precinct boundaries across the site to allow greater flexibility.

There is some uncertainty about the degree of flexibility provided by the Concept Plan approval to accommodate such changes in circumstances, and this uncertainty is already creating issues for potential development of the Mayfield site. Stolthaven has recently presented a proposal to expand the throughput capacity of the bulk liquid fuel facility which has recently been developed on part of the site.

Although Stolthaven's proposal would not infringe the overall environmental limits established by the Concept Plan approval, on a prescriptive reading it could be viewed as being inconsistent with:

- The precinct based traffic limits referenced in the Concept Plan approval
- The indicative trade volume estimates and indicative precinct boundaries referenced in the environmental assessment (AECOM 2010) even though both of these were intended to be flexible and subject to change.

Given the recent decision by the NSW Government to privatise the Port of Newcastle via a 99 year lease it is extremely important that there is certainty provided for potential investors, and also for developers of the Mayfield site such as Stolthaven, regarding the scope and intent of the Concept Plan and in particular the degree of flexibility that was intended.

Environmental Impacts

NPC considers that that there would be no significant environmental impacts associated with the proposed modifications to the Concept Plan approval in respect to any of the following key issues which were originally assessed:

- Road and rail transport
- Hazard/risk
- Air quality and noise.

The environmental impacts associated with the proposed modifications of the Concept Plan approval are discussed in more detail in Section 7 of this document. However, although the change in approach from precinct based to overall site based limits may result in a shift in impacts between precincts within the site, it would not result in any change in impacts at the overall site boundary which is the primary consideration.

The modifications do not alter the requirement that all future developments within the Concept Plan area will require further approval and will be subject to the detailed environmental assessment and other requirements as outlined in Schedule 3 of the Concept Plan approval.

2. OVERVIEW OF THE EXISTING ENVIRONMENT

The Port

The Port of Newcastle is one of three key ports servicing NSW, the others being Port Botany and Port Kembla. The Port of Newcastle is the economic and trade centre for the resource rich Hunter Valley and for much of the north and northwest of NSW.

The Port of Newcastle is Australia's oldest and one of the largest tonnage throughput ports. It is also one of the world's largest coal export ports, with coal exports representing more than 90% of total throughput tonnage. Other bulk cargoes handled through the Port include grains, vegetable oils, alumina, fertiliser and ore concentrates.

General cargo trades are also handled through the Port and include products such as aluminium, steel and machinery. The Port also receives cargoes for regional industries such as heavy equipment for the mining industry.

The Proponent and Land Ownership

The proponent for the Mayfield Concept Plan approval, and for this proposed modification to the Concept Plan approval, is NPC.

NPC is a corporation owned by the Government of New South Wales. NPC is responsible for the management, development and operation of seaport facilities within the Port of Newcastle.

NPC is also the registered owner of the Mayfield Concept Plan site (formerly described as Lot 33 in DP 1116571 and now known as Lot 4 in DP 1177466) with ownership of the site having been transferred from Government Property NSW **(GPNSW)** to NPC in early 2013.

The NSW Government has recently announced that it intends to privatise the Port of Newcastle by offering a 99 year lease to a private operator. The private operator will be selected by the NSW Government after a tender process which will be undertaken during 2013/2014.

Land Use

The Site

The site is located on part of the former BHP Steelworks site at Mayfield approximately 7km north west of the Newcastle Central Business District (**CBD**). The site was formerly occupied by the long running BHP Steelworks operation which was closed in 1999.

The site adjoins the South Arm of the Hunter River and has a total area of approximately 90 hectares. The site is relatively flat and is largely devoid of vegetation. The site and adjacent areas in the South Arm of the Hunter River have

recently been remediated by the Hunter Development Corporation (**HDC**) and BHP Billiton (**BHPB**).

Parts of the site either have been developed, or are in the process of being developed, for a range of port related activities including:

- An existing general purpose cargo handling facility known as Mayfield Berth 4. This facility operates under an existing approval originally issued in April 2001 (DA No.293-09-00) which allowed for remediation of soil and groundwater contamination and development of the site as a multi-purpose terminal, including container terminal and general cargo handling facility
- An existing pipeline gantry which supplies coal, tar and pitch products unloaded via BHP Berth 6 to the nearby Koppers facility
- A bulk liquids facility to be operated by Stolthaven has been approved as a transitional project under Part 3A of the EP&A Act in June 2012 (MP08_0130) and this approval was subsequently modified in July 2013 to allow an increase in throughput capacity. The facility is currently under construction in the north western part of the site
- A cement terminal facility to be run by Independent Cement and Lime (**ICL**) has been approved as a transitional project under Part 3A of the EP&A Act in June 2013 (MP08_0198).

The Mayfield Concept Plan approval specifically states that the transitional Part 3A approvals for the bulk liquid facility and cement terminal facility are not subject to the Concept Plan.

The Mayfield site is strategically significant in the context of the Port of Newcastle given its size (90 hectares), significant deepwater river frontage to the South Arm of the Hunter River and accessibility to the existing arterial road and rail freight transport networks.

The site has significant development potential and represents an excellent opportunity for future expansion of the port operations. Development of the site also has the potential to provide for diversification of port trade, which is currently heavily focussed on coal exports, to include a greater proportion of bulk material, bulk liquids and general purpose cargos.

The strategic significance of the Mayfield site has been recognised in a series of documents including (amongst others):

- Draft NSW Freight and Ports Strategy (2012)
- Strategic Development Plan for the Port of Newcastle (2013)
- State Environmental Planning Policy (Major Development) 2005.

Surrounding Area

The site is located in an area of Newcastle that is dominated by industrial and port related land uses. Directly adjoining the site to the north is One Steel and to the south is Port Waratah Coal Services (**PWCS**).

To the west of the site is vacant land under the control of HDC and formerly known as the Intertrade Industrial Park (**IIP**). Previously there was a proposal to develop this site for a mix of industrial and commercial land uses. However, the agreement to develop the site was rescinded in early 2013 and HDC is currently reviewing future development options.

To the north of the site is the South Arm of the Hunter River and across the river on Kooragang Island are a number of significant industrial facilities and coal loading facilities run by PWCS and Newcastle Coal Infrastructure Group (**NCIG**).

Although the site does not directly adjoin any residential properties, there are three main residential areas in reasonable proximity to the site:

- To the west beyond the IIP site and across Industrial Drive is the Mayfield residential area which, at its closest point, is approximately 400 metres from the site boundary
- To the south beyond the PWCS coal terminal facility is the Carrington residential area
- To the east across the Hunter River and Walsh Point on Kooragang Island is the Stockton residential area.

Road and Rail Network

Industrial Drive is the major arterial road providing access to the site and the wider industrial and port areas which surround it. Industrial Drive is a divided carriageway with 2 lanes of traffic in each direction. It provides access to the Newcastle CBD to the south, to Kooragang Island (via Tourle Street) to the north and to the Pacific Highway, F3 Freeway and New England Highway to the north west.

The Mayfield site can be accessed from Industrial Drive either from Ingall Street or Selwyn Street. Selwyn Street provides direct access to the site while Ingall Street connects to Steelworks Road which has been extended to connect with the north western portion of the site.

Newcastle Port is served by two main rails loops, one serving Kooragang Island and one serving Port Waratah at Carrington. The Port Waratah rail loop is the most relevant to the site at Mayfield. It services a coal export facility (Port Waratah Coal Services) and a grain export facility (Graincorp) on the south side of the Hunter River. The rail loop is connected to the Main North line at Islington Junction.

The Port Waratah rail loop connects with the following local rail infrastructure in the vicinity of the Mayfield site:

- The Port Waratah coal handling facility
- The Bullock Island and Graincorp grain handling facilities
- Brambles and Pasminco sidings
- Morandoo and One Steel sidings provide rail access to the Mayfield site.

3. STRATEGIC DEVELOPMENT PLAN FOR THE PORT OF NEWCASTLE

The Strategic Development Plan for the Port of Newcastle 2013-2043 was prepared by NPC in 2013. The Plan outlines NPC's strategy for the long term development of the Port of Newcastle over the next 30 years.

The Plan was prepared in consultation with the key stakeholders including industry, government agencies and the local Newcastle community. The Plan has been adopted by the NPC Board and approved by the NSW Minister of Ports.

On pages 52-54 of the Plan there is discussion about the strategic importance and development potential of the Mayfield site for port related activities. The following is a summary of the main issues discussed:

- NPC is seeking to develop the site for port related activities to accommodate a diverse range of cargo handling infrastructure and promotion of trade
- The site will initially be developed for bulk liquids and a multi-purpose cargo facility focussed around bulk materials and general cargo
- The Concept Plan establishes the broad parameters and environmental performance criteria to assess and develop future projects. It also provides a level of certainty for regulators and the local community that the site will be developed in a consistent and environmentally responsible manner
- NPC will also seek to develop the adjoining 10 hectare Intermodal Site which provides an intermodal opportunity to consolidate cargoes for export, or to empty import containers thereby adding value at a location adjacent to the Port.

On page 53 the Strategic Development Plan includes a figure showing the Mayfield precinct and this is attached as **Figure 1** for reference. The figure shows the Mayfield development site including the bulk liquids precinct and the adjoining Intermodal Site. So as to provide flexibility for future development proposals no other precincts or indicative precinct boundaries are shown on this figure.

Figure 1 **Mayfield Precinct (Strategic Development Plan for the Port of Newcastle 2013-2043)**

4. EXISTING MAYFIELD CONCEPT PLAN APPROVAL

Background

In July 2012, NPC was granted the Concept Plan approval for development of a range of port related activities on the Mayfield site. The site was to be developed progressively in stages to accommodate future trade needs over a 20-25 year timeframe. Future project approvals would be required for individual developments within the Concept Plan area.

The Concept Plan identifies the arrangement of port related activities generally within five precincts. It was recognised that the boundaries between the precincts were approximate only and subject to change in the future to provide flexibility to accommodate future trade needs. New road and rail infrastructure to service the development of these precincts was also proposed.

The Concept Plan was developed for a range of reasons including:

- To provide an overall vision for the intended development of the site over a medium/long term time horizon
- To ensure that development of the site occurs in a co-ordinated and efficient manner rather than in a piecemeal and ad hoc fashion
- To promote the highest and best use of the site for port related uses whilst minimising potential environmental impacts
- To establish overall cumulative environmental limits for the site whilst providing reasonable flexibility for future development that might occur
- To provide some certainty to key government agencies and the local community regarding NPC's plans for development of the site.

Intent of the Concept Plan

The intent of the Mayfield Concept Plan as described above is referenced in a series of documents including the original environmental assessment for the Concept Plan (AECOM 2010) and a number of NSW Director General Environmental Assessment Reports relating to the site. Relevant references from these documents have been summarised in **Appendix A**.

In summary, the intent of the Concept Plan was to establish overall cumulative environmental limits for the site. To assist in determining these limits, indicative estimates were provided of the forecast trade volumes for each of the precincts. The cargo types and indicative trade volumes which were discussed in the environmental assessment are detailed in Table 1 below.

Given that the site was to be developed progressively over a 20-25 year timeframe two potential development scenarios were assessed - one at 2024 and one at 2034. The only difference in the two scenarios was that the trade volume for the container precinct increased from 600,000 TEUs per annum (2024) to 1 million TEUs per annum (2034).

Table 1 – Indicative Cargo Types and Trade Volume Estimates for Mayfield Concept Plan

Precinct	Indicative Annual Trade Volumes (2024)	Indicative Annual Trade Volumes (2034)
Bulk Liquids	1,010 ML	1,010 ML
Containers	600,000 TEUs	1 million TEUs
General Purpose	1.35 million tonnes	1.35 million tonnes
Bulk and General	2.4 million tonnes	2.4 million tonnes
NPC Operations	N/A	N/A

Based on these estimates overall environmental limits were established for the site in relation to key issues such as road traffic, rail traffic, noise and air quality.

By establishing overall environmental limits for the Mayfield site the intent of the Concept Plan was to allow a reasonable degree of flexibility for future developments that may occur on the site over the anticipated 20-25 year timeframe. This is an important consideration as it is not realistic to expect that NPC can, with precision over this time period, accurately forecast annual trade volumes for each commodity type and/or within each precinct.

It was also recognised that there were a range of circumstances which could change over the extended development timeframe for the site and significantly influence the future development of the site. These include potential changes in government policy, market demand, general economic conditions and port technology.

As a result it was intended that the Concept Plan would not be interpreted or applied in a prescriptive manner except in circumstances where the overall environmental limits for the site were likely to be exceeded.

A reasonable degree of flexibility in the Concept Plan approval was also considered appropriate given that individual developments within the site will be subject to separate assessment and approval processes in the future.

Traffic Limits

The Concept Plan approval established precinct based limits on traffic movements and cargo volumes being moved by road. These limits were focussed on the container precinct as this precinct was assessed as being likely to generate the majority (approximately 75%) of all road traffic from the overall Mayfield site.

The traffic limits in the Concept Plan also reflected a staged approach whereby traffic related impacts would be progressively assessed as the site, and in particular the container precinct, developed over time. The stages were as follows:

- Container road traffic volume equivalent to 200,000 TEU per annum (initial stage)

- Container road traffic volume equivalent to 480,000 TEU per annum (intermediate stage)

- Container road traffic volume equivalent to 700,000 TEU per annum (ultimate stage)

Limits of the Concept Plan Approval

It should be noted that the Concept Plan approval does not apply to:

- the bulk fuel storage facility (Stolthaven) and cement terminal (ICL) which are to be developed on the site and are subject to separate approvals as transitional Part 3A projects under Schedule 6A of the Act (refer, page 1, determination c) of the Concept Approval)
- berths, berthing or harbour operations (refer, Schedule 2, Condition 1.6 of the Concept Plan approval)
- approved or legally operating activities at the date of the approval, such as the general cargo handling facility at Mayfield Berth 4 (refer, Schedule 2, Condition 1.6 of the Concept Plan approval).

Any future applications on the site relating to further expansion of the bulk fuel storage facility would no longer be subject to the transitional provisions under Part 3A. As a result these applications would be assessed under either Part 4 or Part 5 of the EP&A Act and therefore would be subject to the provisions of the Concept Plan approval.

5. DESCRIPTION OF PROPOSED MODIFICATIONS

NPC is seeking a modification of the Concept Plan approval to:

- Remove reference to prescriptive precinct or cargo based road and rail traffic limits and replace these with reference to overall traffic limits for the site

- Replace reference to developing maximum sound power levels for each precinct with development of an overall Site Noise Model which is a more sophisticated and robust method of assessing cumulative noise impacts

- Ensure the approval appropriately reflects the original intent of the Concept Plan, which was to allow reasonable flexibility for future development of the site provided that the overall environmental limits established by the Concept Plan are not exceeded.

The proposed modifications to the Concept Plan are identified in **Table 2** below together with an explanation/justification for each proposed modification.

The proposed modifications to the text of the Concept Plan approval are detailed separately in **Section 9**.

Table 2 Justification of Proposed Modification of Concept Plan Approval

Requirement No.	Proposed Modification	Justification for Proposed Modification
Schedule 3 – 2.1 e)	Replace total container freight road volumes per annum with equivalent total truck movement limits for the site as detailed in Table 3 (see further discussion below).	Overall site based truck movement limits are considered to be more appropriate for the Concept Plan approval than precinct based limits because overall site traffic (rather than precinct based traffic) is the key influence on issues such as intersection performance, mid-block capacity and traffic noise. There will be no change in potential environmental impacts as a consequence of replacing container freight road volume limits with total truck movement limits.
Schedule 3 – 2.1 g)	Remove reference to sound power levels in sub-paragraph i. and iii.	These are no longer required given the development of the cumulative Site Noise Model in modified requirement 2.1 and requirement 2.19 (see further discussion below).
Schedule 3 – 2.3 and Table 1	Replace reference to container freight road limits with equivalent total truck movement limits for the site. Rename Table title.	These total limits are detailed in a new Table 1 and have been calculated by adding: - truck movement limits for the Bulk and General, General Purpose and Bulk Liquid precincts (currently referenced in existing Table 2), i.e. 240,104 truck movements per annum, with - truck movement limits for the Container Precinct equivalent to a container road volume of 200,000 TEUs per annum (referenced in existing Table 1), i.e. 222,000 truck movements per annum. The modified Table 1 is referred to as the Initial Stage because it better reflects the principle of allowing staged development of the Concept Plan site over time so that potential transport related impacts could be progressively assessed before development can proceed to the next stage. Renaming the Table in this manner is also considered to be more logical and easily understood. The Total Truck Movements cannot be exceeded except as identified in requirement 2.3a).

Requirement No.	Proposed Modification	Justification for Proposed Modification
Schedule 3 – 2.3a) and Table 2	Replace reference to container freight road limits with equivalent total truck movement limits for the site. Rename Table title.	These total limits are detailed in a new Table 2 and have been calculated by adding: - truck movement limits for the Bulk and General, General Purpose and Bulk Liquid precincts (referenced in existing Table 2), i.e. 240,104 total truck movements per annum, with - truck movement limits for the Container Precinct equivalent to a container road volume of 480,000 TEUs per annum (as outlined in Table 5.4 of the revised Transport Assessment which accompanied the Submissions Report (AECOM December 2010)) i.e. 533,334 total truck movements per annum. The modified Table 2 is referred to as the Intermediate Stage because it better reflects the principle of allowing staged development of the Concept Plan site over time so that potential transport related impacts could be progressively assessed before development can proceed to the next stage. Renaming the Table in this manner is also considered to be more logical and easily understood. The Total Truck Movements cannot be exceeded except as identified in requirement 2.3b) which includes the implementation of a Transport Infrastructure Strategy.

Requirement No.	Proposed Modification	Justification for Proposed Modification
Schedule 3 - 2.3b) and Table 3	Replace reference to container freight road limits with equivalent total truck movement limits for the site. Rename Table title.	These total limits are detailed in a modified Table 3 and are calculated by adding: - truck movement limits for the Bulk and General, General Purpose and Bulk Liquid precincts (referenced in existing Table 2), i.e. 240,104 truck movements per annum, with - truck movement limits for the Container Precinct equivalent to a container road volume of 700,000 TEUs per annum (as outlined in Table 5.21 of the revised Transport Assessment which accompanied the Submissions Report (AECOM December 2010) but with the container road volume reduced proportionately from 800,000 to 700,000 TEUs to reflect the objective of increasing the rail modal split from 20% to 30% as per the intent of requirement 2.3b)) i.e. 777,778 total truck movements per annum. This is referred to as the Ultimate Stage because it better reflects the principle of allowing staged development of the Concept Plan site over time so that potential transport related impacts could be progressively assessed before development can proceed to the next stage. Renaming the Table in this manner is also considered to be more logical and easily understood. The Total Truck Movements cannot be exceeded under any circumstances.
Schedule 3 – 2.4	Replace the reference to container freight movements with total truck movements and to correct table reference in paragraph 2 of the requirement.	Implementation of the Transport Infrastructure Strategy is triggered by exceeding container freight road limits of 480,000 TEUs per annum (i.e. 533,334 truck movements per annum) which are detailed in Table 2, not Table 1.

Requirement No.	Proposed Modification	Justification for Proposed Modification
Schedule 3 – 2.8	Replace the reference to container freight road and rail movements with total road and rail traffic limits.	The total truck movement limits identified in modified Table 1 are equivalent to container road freight movements exceeding 200,000 TEUs per annum (i.e. 222,000 truck movements per annum). An average of 3 trains per day (3 trains in and 3 trains out) is equivalent to container rail movements exceeding 120,000 TEUs per annum.
Schedule 3 - 2.15	Renumber Table 3 to Table 4 and adjust Table reference also.	A new Table 3 has been included in requirement 2.3 therefore subsequent tables need to be renumbered.
Schedule 3 - 2.16 and 2.17	Replace the reference to developing maximum sound power levels for each precinct with developing the Concept Plan Site Noise Model. Renumber Table 4 to Table 5 and adjust Table reference also.	Compliance with the requirement under the Concept Plan approval to develop the Concept Plan Site Noise Model has obviated the need to develop maximum sound power levels for each precinct. This approach has been discussed and agreed with NSW EPA. A new Table 3 has been included in requirement 2.3 therefore subsequent tables need to be renumbered.
Schedule 3 – 2.18	Replace reference to container freight road movements up to 700,000 TEUs with reference to equivalent total truck movement limits as detailed in Table 3	See above.

6. JUSTIFICATION FOR PROPOSED MODIFICATIONS

Change in Circumstances

The need for the modification has arisen as a result of a recent process undertaken by NPC to engage interest from potential lessees who may wish to be involved in developing the Mayfield site. This has resulted in more current information being available regarding likely cargo types and the potential for growth in trade volumes over the life of the Concept Plan development.

This current market information has been influenced by:

- a shift in NSW government policy regarding the strategic role of Newcastle Port, particularly in respect to containers. This change in policy is detailed in the *draft NSW Freight and Ports Strategy* which was released in late 2012 some months after the Concept Plan was approved
- significant changes in market drivers relating to the NSW fuel supply chain including:
    - closure of refinery operations in Sydney at Clyde and Kurnell
    - introduction of the carbon tax, which is likely to impact on the competitiveness of road transport in favour of ship and rail transport particularly over longer distances
    - continued growth in demand for diesel fuel by mining operations in the Hunter Valley region
    - improvements to logistics operations in the bulk fuel industry which have allowed facilities to handle increased throughput of fuels more efficiently
- growth in global export demand for bulk commodities such as grain and cement products which are logically supplied through a regional port such as the Port of Newcastle.

None of these circumstances were anticipated at the time the Concept Plan application was originally being prepared in 2010 and subsequently assessed.

As a result it is now likely that development of the Mayfield site will involve a significant decrease in container trade volumes and an increase in bulk liquid fuel and bulk material trade volumes by comparison with the indicative trade volumes assessed in the Concept Plan environmental assessment (AECOM 2010). The revised trade volume estimates are detailed in **Table 3** below.

Table 3 - Updated Indicative Trade Volumes

Precinct	Indicative Annual Trade Volumes – Original Estimate	Indicative Annual Trade Volumes – Updated Estimate	Indicative Annual Trade Volumes – Change
Bulk and General	2.40 Mtpa	3.90 Mtpa	+1.50 Mtpa
General Purpose	1.35 Mtpa	1.35 Mtpa	No change
Container	1,000,000 TEUs	200,000 TEUs	-800,000 TEUs
Bulk Liquids	1,010 ML	3,400 ML	+2,390 ML
NPC Operations	300 employees	300 employees	No change

As a result there is likely to be the need to adjust precinct boundaries principally to decrease the area designated for the container terminal and to increase the area allowed for the bulk liquids and bulk and general precincts.

Effectively the overall development capacity of the site and associated environmental impacts would be shifted between precincts within the site. However, the overall development potential and associated environmental impacts for the site would not change. On this basis NPC considers that it is appropriate to remove the artificial precinct boundaries across the site.

Stolthaven Proposal

There is some uncertainty about the degree of flexibility provided by the Concept Plan approval to accommodate such changes in circumstances, and this uncertainty is already creating issues for potential development of the Mayfield site.

As an example, currently Stolthaven is developing a bulk liquids facility in the north west portion of the site. Stolthaven has expressed interest in expanding the overall capacity and footprint of this facility in stages and ultimately beyond the indicative precinct boundaries and trade volume estimates contained in the environmental assessment (AECOM 2010) for the Concept Plan.

The development would be expanded as follows:

- **First stage** (approved) – development of facility to cater for 400ML of bulk fuels per annum
- **Second stage** (application being prepared) – expansion of throughput capacity to cater for up to 1,010 ML of bulk fuels per annum
- **Ultimate stage** (proposed) – expansion of facility to cater for up to 3,400 ML of bulk fuels per annum

As a result, there would be corresponding reductions in the scale of development permitted in other parts of the Mayfield site, such as the container precinct, to ensure that the overall environmental limits established by the Concept Plan approval in respect to issues such as road and rail traffic movements, noise and air quality emissions are not exceeded.

Intent of the Mayfield Concept Plan

The original intent of the Concept Plan was to allow for reasonable flexibility for future development of the precincts through to 2034. This intent is clearly stated in the *Mayfield Site Port Related Activities Concept Plan Environmental Assessment (AECOM 2010)* cited in Condition 1.1 of the Terms of the Concept Plan Approval. The report states:

> The proposed concept would allow reasonable flexibility for future development of the five key land-based operational precincts allowing the detailed plans … to evolve over the period through 2034.

Given the strategic significance of the Mayfield site, and the extended timeframe for its likely development, it was considered appropriate for the Concept Plan to provide this flexibility, provided the overall environmental limits for the site established by the Concept Plan are not exceeded.

However, despite this some of the requirements of the Concept Plan approval relating to road and rail transport movements, particularly those which reference precinct based rather than overall site based transport movement limits, operate in an inflexible and overly prescriptive manner. This is contrary to the intent of the Concept Plan.

The modifications proposed by NPC would allow reasonable flexibility to accommodate potential changes in circumstances over the extended timeframe for development of the site while providing that the overall environmental limits for the site established by the Concept Plan are not exceeded. This includes flexibility to respond to potential changes in government policy, market demand, general economic conditions and port technology.

It is considered appropriate to modify the Concept Plan approval to establish overall cumulative environmental limits for the site rather than limits which apply to individual precincts or which reference specific cargo and trade volume limits.

Simplicity and Improved Understanding

Some parts of the Concept Plan approval are complex and difficult to understand, in particular requirement 2.3 and Tables 1 and 2. The proposed modifications assist in simplifying the approval by:

- incorporating overall site based limits rather than precinct based limits
- adopting standard terminology (truck movements) rather than limits which reference specific cargo types (Container TEUs)
- clarifying the progressive staged approach to development of the site as expressed by total truck movements.

Truck Movement Limits

NPC is of the view that the Concept Plan approval should be modified because the current wording of the approval leads to uncertainty as to how the limits on truck movements affect the internal operation of the Port.

At the time the approval was issued the container precinct was expected to generate approximately 75% of all traffic movements from the site. The remaining precincts were expected to generate approximately 25% and therefore were considered to be of lesser concern. This helps to explain why Table 1 in condition 2.3 of the approval refers to traffic limits only in respect to the container precinct.

Due to a recent change in government policy the container terminal has now been deferred and therefore the expression of container trade volume and traffic movement limits in Table 1 is potentially misleading. Also in Table 1 the traffic volumes to be generated by the container precinct are expressed as a unit of cargo (TEUs) which is not appropriate for measuring traffic movements in other precincts.

Therefore the approval should be modified to identify traffic movement limits for development across the whole site as originally intended, rather than a precinct based limit as expressed. This ensures that there is a common standard of measurement for traffic movements across the site.

The proposed modifications will have no impact on local intersection performance, mid-block capacity on the arterial road network or traffic noise and air quality impacts. Traffic related impacts associated with development of the Mayfield site, arise as a result of traffic generated across the entire site (rather than from traffic generated within individual precincts) and these volumes will not change.

Operational Noise and Maximum Sound Power Levels

One of the other proposed modifications relates to the operational noise requirements, and specifically the requirement to develop maximum sound power levels for each precinct. These maximum sound power levels were originally developed as a relatively crude mechanism to ensure that specified overall noise limits for the Concept Plan site were shared between precincts.

NPC has recently spent considerable time and effort in developing a Site Noise Model for the Concept Plan in accordance with requirement 2.19. Development of the noise model has obviated the need to develop maximum sound power levels for each precinct.

The proposed modifications remove references to developing maximum sound power levels for each precinct and replace these with developing a Site Noise Model which is a more refined and flexible tool. Importantly, no change is proposed to the operational noise goals at sensitive residential receivers (requirement 2.17).

The approach of developing the Site Noise Model has been discussed and agreed in principle with both DP&I (Geoff Parnell) and EPA (Larry Clark). NPC and AECOM made a presentation of the draft Site Noise Model to both DP&I and EPA at a meeting on 4 June, 2013 and favourable comment about the model was received.

7. ENVIRONMENTAL ASSESSMENT

In all cases it is considered that there would be no detrimental effects associated with modifying the Concept Plan approval in the manner proposed. The potential impacts are discussed in more detail under the headings below:

Truck Movement Limits

The overall site based truck movement limits have been developed by cumulatively adding the precinct based limits referenced in the Concept Plan approval and in the original environmental assessment (AECOM 2010). There is no change to the overall truck movement limits allowed. The impacts associated with these limits have already been subject to detailed assessment when assessing the Concept Plan for approval and therefore no further environmental assessment is required.

The proposed modifications will have no impact on local intersection performance, mid-block capacity on the arterial road network or traffic noise and air quality impacts. Traffic related impacts associated with development of the Mayfield site, arise as a result of traffic generated across the entire site (rather than from traffic generated within individual precincts) and these volumes will not change.

The Concept Plan approval includes detailed mitigation measures to address potential impacts associated with road and rail transport movements generated by the Concept Plan and no changes are proposed to these mitigation measures.

The principle of allowing for staged development of the Concept Plan site over time so that potential transport related impacts could be progressively assessed has been maintained. Truck movement limits for the initial (Refer Table 1), intermediate (refer Table 2) and ultimate (refer Table 3) stages of development have not been changed. The only amendment is that limits are now expressed as overall site based (rather than precinct based) limits and as truck movement (rather than cargo volume) limits.

There is no change proposed to the considerations which must be met before the overall truck movement limits for each stage of development can be exceeded.

Site Noise Model

A cumulative Site Noise Model for the Concept Plan is a more refined and robust tool which will enable noise impacts associated with individual projects as well as cumulative noise impacts to be progressively monitored. Given that the model has been developed in accordance with the requirements of the Concept Approval, no further environmental assessment is required.

Further, the modified Concept Plan approval requires the Site Noise Model to meet the operational noise goals at sensitive residential receivers outlined in requirement 2.17. No change is proposed to these operational noise goals.

Hazard and Risk

The increase in the annual throughput capacity of the bulk liquid precinct and in particular increases in the storage, transfer and transport of fuels has the potential to create hazard/risk issues. However, the following points are noted in this regard:

- Bulk fuels will continue to be transferred using an enclosed and controlled system (from ships at berth via a marine loading arm to pipeline and then to storage tanks) albeit in larger volumes and more frequently

- The site is of sufficient size to provide adequate separation distances between fuel storage and transfer areas and adjoining development (within and external to the site) so that risks associated with potential fuel ignition and fire can be managed to acceptable levels. In particular the site is located some distance (minimum 400 metres) from the closest residential areas of Mayfield

- Standard mitigation measures for the bulk liquid precinct would include:-

    - automated shut down of the marine loading arm should there be a spill during transfer of fuel;

    - design of storage tanks to include a floating roof and venting mechanisms to minimise build-up of fuel vapours within the tank;

    - fuel storage areas to be designed with bunds so that adequate contained storage capacity is available in the event of a spill

- All future proposals will need to obtain a separate project approval and potentially hazardous projects involving the transport, handling or storage of hazardous and dangerous goods will need to undertake a hazard and risk assessment (refer condition 2.1i) including consideration of State Environmental Planning Policy (SEPP) No.33 – Hazardous and Offensive Development and Hazardous Industry Planning Advisory Paper (HIPAP) No.6 – Hazard Analysis

- There are other safeguards proposed in the Concept Plan regarding hazards, dangerous goods and chemical storage including the requirement for a Port Emergency Response Plan (condition 2.26), Safety Management System (condition 2.27) and regular hazard audits of projects (condition 2.28)

Further Approval Required for Future Developments

Finally, it should be noted that all future developments within the Concept Plan area would require further approval and would be subject to the detailed environmental assessment and other requirements detailed in Schedule 3 of the Concept Plan approval.

8. LEGAL CONSIDERATIONS

a. The Mayfield Port project is currently a transitional Part 3A project for which there is a Concept Plan. The Concept Plan of the Newcastle Port Site was approved on 16 July 2012.

b. The Concept Plan approval was given subject to Terms of the Concept Plan approval provided in Schedule 2 and modifications to the Concept Plan provided in Schedule 3. The Concept Plan itself is provided in Schedule 1 of the Concept Plan approval.

c. There are a number of requirements of the Concept Plan approval, particularly those relating to road and rail transport movements, which specifically reference precinct based, rather than overall site based, transport movement limits. It is considered that these requirements, in practice, operate in an inflexible and overly prescriptive manner, contrary to the original, and clearly stated, intent of the Concept Plan.

d. We have been given legal advice from our solicitors that the most appropriate way to address this issue is to seek a modification of the Concept Plan approval under the provisions of Section 75W(2) of the EP&A Act.

e. The modification of the Mayfield Port project will:

    i. not result in any changes to the project as described in the Concept Plan approval and would not constitute a 'radical transformation' of the project,

    ii. have only limited environmental consequences beyond those that have been the subject of assessment, and

    iii. generally comply with the terms of the Concept Plan approval despite the modification

    iv. generally be consistent with the original intent of the Concept Plan approval.

f. Consequently, we seek the Minister's approval for the modification.

9. CONCEPT PLAN APPROVAL AS MODIFIED

Concept Approval

Section 75O of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning and Infrastructure, under the *Environmental Planning and Assessment Act 1979* (the Act), determine:

a) to approve the Concept Plan referred to in Schedule 1, subject to the terms of approval in Schedule 2 and the modifications in Schedule 3;
b) under section 75P(1)(b) of the Act, that approval to carry out the development the subject of the Concept Plan (other than development for the purpose of the construction and operation of a bulk fuel storage facility or cement terminal that is a transitional Part 3A project under Schedule 6A to the Act) be subject to:
    i. Part 4 of the Act, where any part of the development is of a type that is identified as permissible with consent under an applicable environmental planning instrument (EPI); or
    ii. Part 5 of the Act, where any part of the development is an activity within the meaning of that Part and is identified as permissible without consent under an applicable EPI; or
    iii. section 76 of the Act, where any part of the development is specified as exempt development by an applicable EPI; and
c) under section 75P(2)(c) of the Act:
    i. where development is subject to Part 4 of the Act (other than complying development), that development is subject to the further environmental assessment requirements specified in Schedule 3 of this approval, and
    ii. where development is subject to Part 5 of the Act, that development is subject to the further environmental assessment requirements specified in Schedule 3 of this approval.

Brad Hazzard MP
Minister for Planning and Infrastructure

Sydney 2012

SCHEDULE 1

Application No:	09_0096
Proponent:	Newcastle Port Corporation
Approval Authority:	Minister for Planning and Infrastructure
Land:	Lot 33 in DP 1116571 - land within the former BHP Steelworks site, off Selwyn Street, Mayfield, within the Newcastle local government area
Proposal:	The concept plan involves the redevelopment of 90 hectares of port-side land in Mayfield, with five key precincts generally as follows: • **NPC Operational Precinct**: for managing operations by NPC within the Port of Newcastle; • **Bulk and General Precinct**: for handling and storing bulk cargoes; • **General Purpose Precinct**: for handling and storing cargo containers, heavy machinery, break-bulk and Roll On Roll Off cargoes; • **Container Terminal Precinct**: for the storage and transfer of containers; and • **Bulk Liquid Precinct**: for the receival, storage, blending and distribution of fuels and biofuels. The Concept Plan also includes supporting road and rail infrastructure to service the above precincts.

DEFINITIONS

Act, the	*Environmental Planning and Assessment Act, 1979*
ARTC	Australian Rail Track Corporation
Concept Plan	The concept plan the subject of this approval
Concept Plan Site	Land on which all components of the Port Terminal Facilities will be located.
Council	Newcastle City Council
Department, the (DP&I)	Department of Planning and Infrastructure
Director-General, the	Director-General of the Department of Planning and Infrastructure (or delegate)
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's Approval is required, the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested, the time taken for the Proponent to respond in writing will be added to the one month period.
EA	Environmental Assessment
EPA	Environment Protection Authority of the Office of Environment and Heritage
HDC	Hunter Development Corporation
Intertrade Industrial Park	The site adjoining the Concept Plan, being part of the former BHP steel works site.
Minister, the	Minister for Planning and Infrastructure
Mtpa	Million tonnes per annum
OEH	Office of Environment and Heritage (formerly the Department of Environment, Conservation, Climate Change and Water)
Project	Development as described in the Concept Plan (including development to be assessed under Part 4 and Part 5 of the Act)
Project Approval	Approval granted for development in accordance with the *Environmental Planning and Assessment Act, 1979*
Proposal	Port Terminal Facilities - Concept Plan
Proponent	Newcastle Port Corporation
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre)
Remediation Works	Works required to remediate and manage contamination and the risks from it.
RLMC	Regional Land Management Corporation
RMS	Roads and Maritime Services
Utilities Infrastructure	Infrastructure to support the future development of the Concept Plan site, including but not limited to water, sewerage, electricity and

	telecommunications infrastructure, but not including transport infrastructure
TEU	Twenty foot equivalent units
VOC	Volatile Organic Compound

SCHEDULE 2

1. TERMS OF CONCEPT PLAN APPROVAL

1.1 The Proponent shall carry out the project generally in accordance with:

a) Major Project Application 09_0096;
b) the *Mayfield Site Port-Related Activities Concept Plan Environmental Assessment*, Volumes 1 to 6, prepared by AECOM Australia Pty Ltd and dated July 2010;
c) the *Mayfield Site Port-Related Activities Concept Plan Submissions Report*, prepared by AECOM Australia Pty Ltd and dated December 2010;
d) the Addendum to the Submissions Report, prepared by AECOM Australia Pty Ltd and dated 4 March 2011; and
e) the terms of this approval.

1.2 In the event of an inconsistency between:

a) the terms of this approval and any document listed from term 1.1a) and 1.1d) inclusive, the terms of this approval shall prevail to the extent of the inconsistency; and
b) any document listed from terms 1.1a) and 1.1d) inclusive, and any other document listed from terms 1.1a) and 1.1d) inclusive, the most recent document shall prevail to the extent of the inconsistency.

1.3 If there is any inconsistency between this concept plan approval and any related approvals (being those approvals subject to the requirements of this Concept Plan), this Concept Plan approval shall prevail to the extent of the inconsistency.

1.4 The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:

a) any reports, plans or correspondence that are submitted in accordance with this Concept Plan approval or any related approvals; and
b) the implementation of any actions or measures contained in these reports, plans or correspondence.

1.5 With the approval of the Director-General, the Proponent may prepare and submit any management plan, strategy or monitoring program required by this approval on a progressive basis. Where a management plan, strategy and monitoring program is required before carrying out any development or stage of development, the document may be prepared and submitted in relation to either discrete components of the project or for a specified time period.

Limits of Approval

1.6 This Concept Plan approval does not apply to berths, berthing or harbour operations. It also does not apply to activities approved or legally operating at the site in accordance with other project approvals at the date of this Concept Plan approval.

1.7 To avoid any doubt, this Concept Plan approval does not permit the construction or operation of any project, which will be subject to separate approval(s) under the Act.

1.8 The provisions of requirements 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.19, 2.20, 2.20 and 2.29 do not apply to utilities infrastructure if developed independently from other port uses.

Contamination

1.9 This Concept Plan approval does not limit or affect the requirements the Voluntary Remediation Agreement issued to the RLMC pursuant to section 26 of the *Contaminated Land Management Act, 1997*, dated 14 September 2005.

1.10 The requirements of development consent DA 293-08-00 approved by the Minister for Planning on 6 April 2001 (and as subsequently modified), as they relate to remediation works, including the maintenance and monitoring of remediation works and the Concept Plan site in general (including groundwater and surface water monitoring), and as they relate to development constructed and operated under the development consent, remain in force, until they are superseded by future project approvals or as otherwise agreed by the Director-General, in consultation with the EPA.

Heritage

1.11 This Concept Plan approval does not limit or affect the requirements the Excavation Permit requirements issued to the RLMC (and transferred to HDC) pursuant to section 140 of the *Heritage Act, 1977*, dated 21 September 2005.

1.12 The requirements of development consent DA 293-08-00 approved by the Minister for Planning on 6 April 2001 (and as subsequently modified), as they relate to cultural heritage, remain in force, until they are superseded by future project approvals or as otherwise agreed by the Director-General, in consultation with the OEH.

Statutory Requirements

1.13 This Concept Plan approval does not remove any obligation to obtain, renew, or comply with licences, permits or approvals as required by law associated with any project subject to this Concept Plan approval.

Existing and Approved Development

1.14 Construction and operational environmental impacts associated with existing and approved development not subject to this shall be considered in the assessment of projects associated with this Concept Plan and shall be incorporated into any management plan, strategy, monitoring program and review (and the like) required under this Concept Plan approval.

SCHEDULE 3

2. MODIFICATIONS TO THE CONCEPT PLAN – ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Project Stages Subject to Other Provisions of the Act

2.1 Under section 75P(2)(c) of the Act, the following environmental assessment requirements apply with respect to future development that is subject to Part 4 (other than complying development) or Part 5 of the Act:

General Requirements

a) demonstration that the project is generally consistent with the requirements of this approval and with the scope and intent of the Concept Plan outlined in the documents under requirement 1.1 of this approval;

b) detailed project description, including construction, operation, maintenance, and staging; and the design and location of ancillary infrastructure (including consideration of the *Utilities Infrastructure Plan* prepared as a requirement of this approval);

c) details of the consultation process and outcomes with relevant stakeholders, including with (but not limited to):
   i. Government authorities, such as DP&I, OEH, EPA, DPI, Transport for NSW, HDC and Council;
   ii. Service and infrastructure providers, such as ARTC, RMS, Railcorp, AusGrid, Hunter Water Corporation and Jemena;
   iii. Special interest groups and the public, including adjoining and affected landowners; and

d) an updated environmental assessment of relevant statutory matters and *Issue-Specific Requirements* for construction and operation (including cumulative impacts of existing and approved development on the site and on adjoining sites) and the identification of relevant avoidance, mitigation and management measures to address associated impacts.

Issue-Specific Requirements

e) a **Transport Assessment** that assesses the transport, access and traffic impacts from projects associated with this Concept Plan. The assessment shall:
   i. consider the transport limits and objectives of the Concept Plan, including the objective of not exceeding ~~a total container freight road volume of 700,000 TEU per annum~~ the total truck movement limits identified in requirement 2.3 (Table 3);
   ii. consider freight volume forecasts and transport demand;
   iii. consider the *Transport Infrastructure Strategy* (if required) and identified infrastructure, service improvements or management measures (if identified);
   iv. consider the traffic performance and functionality of the local, regional and State road network and site access, including the consideration of development within the vicinity of the Concept

Plan site (including connecting road networks) and the cumulative impacts from adjoining development;

v. consider rail impacts associated with the project, including: network capacity and the availability of rail access and paths, rail operations on the Port Waratah and Bullock Island loops, and rail access and interface agreements;

vi. consider the *Transport Monitoring and Review* results undertaken as a requirement of this approval;

vii. identify rail and road infrastructure requirements, including those specified in this approval and the corresponding exceptions;

viii. identify traffic management measures consistent with the requirements of the *Traffic Management Plan* required under this approval;

ix. identify rail service and infrastructure changes and upgrades, and initiatives to facilitate an increased rail share of freight movements;

x. consider construction traffic routes and associated traffic impacts, including capacity constraints, changes to access and safety impacts; and

xi. include consideration of relevant road and rail design standards including but not limited to *Austroads Guide to Road Design 2009 (with RTA supplements) , Australian Standards,* and *Newcastle Development Control Plan 2005 – Element 4.11 (Subdivision).*

f) An **Air Quality and Greenhouse Gas Assessment** that assesses emissions and air quality impacts on local and regional receivers and at a broader level. The assessment shall:

i. identify emissions and pollutants of concern (including from associated shipping and transport activities) and identify surrounding sensitive receptors that may be impacted by potential pollutants;

ii. consider the site pollutant performance criteria identified in this approval;

iii. include a refined assessment of pollutants on receptors, including PM_{10} concentrations, taking into account the *Site Air Quality Model, Meteorological Monitoring and Air Quality Monitoring Program* required under this approval, and cumulative air quality impacts, as relevant;

iv. identify mitigation and management measures that would be implemented to prevent adverse impact to local and regional air quality and sensitive receptors, including designs that allow provision of ‘cold ironing’ and the demonstration of best practice air quality management, with the objective of not increasing emission concentrations beyond the boundary of the site above existing background levels;

v. a scope 1 Greenhouse Gas Assessment and the identification of management measures and sustainability initiatives to reduce greenhouse gas emissions; and

vi. include consideration of the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2001).

g) A **Noise and Vibration Assessment** that assesses noise and vibration impacts. The assessment shall:

i. consider ~~sound power levels and~~ noise goals defined in this approval;

ii. consider the *Concept Plan Noise Model* and *Noise Verification Monitoring Program*, required under this Concept Plan approval and identify project specific noise and vibration criteria;

iii. identify baseline and future conditions and~~,~~ the levels and character of noise and vibration sources ~~and sound power levels~~;

iv. identify sensitive receivers, modelling assumptions and noise and vibration impacts, including on and off-site road and rail noise impacts on receivers within the vicinity of the site, such as road traffic noise impacts on residential areas adjacent to Industrial Drive;

v. include details of noise and vibration attenuation measures and how these would be implemented and managed (including costs to property owners, where relevant), should the predicted levels exceed the Concept Plan and project specific criteria, along with a schedule for implementing such works; and

vi. include consideration of the following guidelines or any documents that supersede them: *NSW Industrial Noise Policy* (EPA, 2000) for operational noise; *Interim Construction Noise Guideline* (DECC, 2009) for site establishment and construction; *Environmental Noise Management – Assessing Vibration: A Technical Guideline* (DECC, 2006) for vibration; the *NSW Roads Noise Policy* (DECCW, 2011) for off-site traffic noise and the *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects* (DECC and DoP, 2007) for off-site rail noise.

h) A **Hydrological Assessment** that assesses the potential on and off site hydrological impacts of the project and the projects interaction with the sites hydrological objectives. The assessment shall:

i. consider flooding coastal risk impacts on the project and adjoining land uses within, adjoining and within the locality of the site, including the consideration of climate change risks, and the NSW sea level rise planning benchmarks;

ii. consider surface and storm water impacts, including interactions with remediation works and the sites drainage regime, spills and leaks and impacts to coastal processes;

iii. consider impacts to groundwater, including the need to isolate stormwater from land contamination and the local groundwater table;

iv. detail flooding, surface and storm water, groundwater, and water quality management and monitoring measures, including the maintenance of measures, the application of first flush

collection systems and Water Sensitive Urban Design measures; and

v. consideration of the *Stormwater Management Strategy* required under this approval; and

vi. relevant documents including the *Floodplain Development Manual* (DIPNR, 2005), *Flood Risk Management Guide* (DECCW, 2010), and *Newcastle Development Control Plan 2005.*

i) A **Hazards and Risks Assessment** for potentially hazardous projects (including projects that are associated with the transport, handling or storage of hazardous or dangerous materials) that details a hazards assessment and the identification of risk reduction measures to ensure that risk levels for the projects are maintained within acceptable levels at a project, precinct and site level. The assessment shall:

i. consider appropriate separation distances, hazard safeguards, *Port Emergency Response Plan*, *Safety Management System*, and *Hazard Audits* as required by this approval;

ii. consider climate change and associated coastal risks and hazards,

iii. consider *State Environmental Planning Policy No.33 – Hazardous and Offensive Development* and associated guidelines and include (as relevant):

a) a hazard analysis taking into account *Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis*, Department of Planning, January 2011, and the identification of impact distances and buffer zones for fire, explosion and gas release (as relevant) to prevent impacts on adjoining land uses both within and external to the site;

b) a hazardous materials transport study detailing routes to be used for the movement of vehicles (road and rail) carrying hazardous or dangerous materials to or from the site, and shall take into account *Hazardous Industry Planning Advisory Paper No 11 – Route Selection*, Department of Planning, January 2011; and

c) a fire safety study taking into account relevant aspects of *Hazardous Industry Planning Advisory Paper No 2 – Fire Safety Study Guidelines*, Department of Planning, January 2011, and *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*, Department of Planning, 1994.

j) A **Contamination Assessment** that assesses the potential environmental and human health risks of site contaminants on the project and impacts on site remediation outcomes, including remediation works and the maintenance and monitoring of those works. The assessment shall:

i. consider contamination risks, potential acid sulfate soils, site suitability and that the project will not increase risks on adjoining sites, waterways and/or projects;
ii. demonstrate compatibility with and will not have a detrimental impact on site remediation works (completed, current and future, as applicable) and the maintenance and monitoring of remediation works, including consideration of:
    a) soil, ground water, surface water, VOC and odour works, including contaminants left in-situ or encapsulated,
    b) the maintenance of remediation works, including cap integrity and permeability, site grading, levels and storm and waste water drainage systems, and VOC management measures,
    c) the structural integrity of drainage works and the barrier wall, including the risk of surface and subsurface displacement resulting from future vertical and lateral loadings, easements, differential settlement, capping beam intrusions and foundation restrictions, and
    d) access to and protection of existing and future groundwater monitoring wells;
iii. demonstrate that the design has assessed VOC risks and that it incorporates controls and protections to protect human health; and
iv. include consideration of the following documents:
    a) *Contaminated Land Management Act, 1997, State Environmental Planning Policy No.55 – Remediation of Land* and related guidelines,
    b) DA 293-08-00 approved by the Minister for Planning on 6 April 2001, as subsequently modified and related management plans, including the *Contaminated Site Management Plan*, dated 2009 prepared by Hunter Development Corporation, and
    c) Voluntary Remediation Agreement pursuant to section 26 of the *Contaminated Land Management Act, 1997*, dated 14 September 2005 and related documents including the *Voluntary Remediation Proposal* prepared by the RLMC, dated 30 August 2005 and the *Remediation Action Plan* dated September 2004 and prepared by Sinclair Knight Mertz for the RLMC.

k) an **Archaeological Assessment** that assesses the potential archaeological resources of the site (historical archaeological relics) and the project impacts on the heritage significance of these resources. The assessment shall:
    i. consider Excavation Permit (2005/S140/041) and the associated Research Design and Methodology;
    ii. consider previous archaeological studies completed for the site, including the *Assessment of the Historical Archaeology and*

Research Design: Newcastle Steelworks Closure Area (Umwelt, May 2005); and

iii. consider relevant documents including the NSW Heritage Manual (NSW Heritage Council) and associated guidelines.

l) an assessment at an appropriate level of detail, of other environmental issues but not limited to: social and economic, waste management, visual, landscaping and lighting impacts. The assessment shall identify the measures for managing and mitigating any impacts, consistent with industry accepted environmental practice.

Berths

m) an assessment of the cumulative impacts of any berthing, water front structure or the like associated with any future project, including consideration of the *Issue-Specific Requirements* noted above, as relevant.

Transport

2.2 Projects associated with this Concept Plan shall be operated with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network, and ~~the container freight road volume~~ the total truck movement limits ~~and traffic movements~~ identified in Table 1, subject to the identified exceptions, which will be considered in future project assessments.

Note: Table 1 should be interpreted with reasonable flexibility to recognise the long term variance in assumed background traffic conditions, which can be influenced by broader transport enhancements and development not related to this concept plan approval.

2.3 Projects associated with this Concept Plan~~, involving the movement of container freight by road,~~ shall not exceed the total truck movement limits presented in Table 1, except as identified.

Table 1 – Initial Staging and Total Truck ~~Container Terminal Staging, Freight Volume and Freight Traffic~~ Movement Limits

~~Total Container Road Volume per annum~~	Total Truck ~~Container Freight Traffic~~ Movements per annum	Total Truck ~~Container Freight Traffic~~ Movements per day	Total Hourly Truck ~~Container Freight Traffic~~ Movements in peak periods
~~200,000 TEU~~	~~222,000~~ 462,104	~~610~~ 1,268	~~46~~ 95

a) Truck movements ~~The movement of container freight~~ by road may exceed the identified limits in Table 1 up to ~~480,000 TEU~~ the limits identified in Table 2, subject to:

i. traffic monitoring identifying that Concept Plan related traffic movements are not having a detrimental impact on the local, regional and State road network and/or predicted background traffic growth is lower than the long term per annum growth rate of 1.0%; or
ii. the use of excess road freight capacity from other development on the site, where that development is approved as having less freight movements than has been approved under this Concept Plan ~~(as detailed in Table 2)~~; or
iii. the consideration of land use planning and development changes within the locality of the Concept Plan site, including approved uses on the adjoining Intertrade Industrial Park site, which may result in less traffic generation than considered under this Concept Plan.

Table 2: Intermediate Staging and Total Truck Movement Limits ~~Road freight movements for other precincts~~

~~Other Precincts~~	Total Truck Movements per annum	Total Truck Movements per day	Total Hourly Truck Movements in peak periods
~~Bulk and General~~	~~117,428~~	~~322~~	~~24~~
~~General Purpose~~	~~81,714~~	~~244~~	~~16~~
~~Bulk Liquid~~	~~40,962~~	~~112~~	~~9~~
~~Total~~	**~~240,104~~ 773,438**	**~~658~~ 2,120**	**~~49~~ 159**

b) Truck movements ~~The movement of container freight~~ by road may exceed the identified limits in Table ~~1 beyond 480,000 TEU and up to 700,000 TEU~~ 2 up to the limits identified in Table 3, subject to:

i. the consideration of the matters listed in requirement 2.3a), as relevant; and
ii. the implementation of a *Transport Infrastructure Strategy* as per requirement 2.4, which has been endorsed by Transport for NSW and RMS.

Table 3: Ultimate Staging and Total Truck Movement Limits

Total Truck Movements per annum	Total Truck Movements per day	Total Hourly Truck Movements in peak periods
1,017,882	**2,790**	**209**

Notwithstanding, projects associated with this Concept Plan shall be operated with the objective of not exceeding the total truck movement limits identified in Table 3 ~~container road volume of 700,000 TEU per annum~~.

Note: The above requirements do not permit an immediate increase to the identified limits in Table 1. Any exceedances of the limits identified in Table 1, consistent with the above requirements, shall only be permitted, following consideration of the exceedances in future project assessments.

Transport Infrastructure Strategy

2.4 ~~The movement of container freight~~ Truck movements by road, which exceed the limits specified in requirement 2.3b) and Table 2, may be undertaken following the preparation, endorsement and implementation of a *Transport Infrastructure Strategy*.

The Strategy shall provide a framework for the development and implementation of local, regional and State road and rail infrastructure improvements or traffic management measures necessary for an increase in ~~container freight~~ truck movements beyond the limits identified in requirement 2.3b) and Table 2 ~~(as described in Table 1)~~. The Strategy shall be developed in consultation with the Department, Transport for NSW, RMS, HDC, Council, adjoining land owners and the local community. The Strategy shall include, but not necessarily be limited to:

a) the objectives and scope of the Strategy;
b) identification of stakeholders associated with the development of the Strategy, consultation undertaken with Stakeholders and how matters raised were considered;
c) freight volume demand forecasts for road and rail freight movement, including a demand and supply analysis and description of the supply chain for the Concept Plan (for all freight movement);
d) identification and alignment of road and rail movements with required road and rail infrastructure and service improvements or management measures required to meet forecast road and rail freight demand;
e) the feasibility of port freight movements utilising existing and identified infrastructure and service provisions measures for the proposal; and
f) identification of how and when the required infrastructure and service improvements or management measures will be delivered, including parties responsible for the funding and implementation of the works.

The Strategy shall be made available to the Director-General and Council following its endorsement by Transport for NSW and the RMS.

Traffic Management Plan

2.5 The Proponent shall prepare and implement a *Traffic Management Plan* for the Concept Plan site in consultation with RMS, HDC, Council, adjoining land owners and the local community to provide a framework for the coordinated management of traffic to, from, and within the Concept Plan site.

The Plan shall include traffic management devices and measures to facilitate the orderly movement of port related traffic movement to/from the road network, and shall include but not necessarily be limited to:

a) measures to ensure heavy vehicle access to and from the site will be primarily along the routes shown in Attachment A to this approval;
b) measures to minimise port freight movements inside am and pm peak traffic periods;
c) measures to encourage the equal distribution of truck movements between the Industrial Drive/George Street and Industrial Drive/Ingall Street intersections;
d) measures to prevent heavy vehicles accessing residential streets and areas within the vicinity of the site and to maintain the residential amenity of the local community; and
e) measures to encourage staff access to the site by means other than private vehicles.

The Plan shall be prepared and implemented prior to the operation of any projects associated with this Concept Plan approval and shall be updated prior to the commencement of any subsequent project approvals associated with this Concept Plan approval.

Transport Infrastructure Upgrades

Link Road

2.6 A link road between Ingall Street and Selwyn Street of suitable standard shall be provided prior to the operation of projects associated with this Concept Plan to minimise traffic impacts on Industrial Drive intersections and to maintain access for emergency vehicles to and between the different precincts of the site.

The timing of provision of the link road may be varied, subject to consideration of the matters outlined in requirement 2.9.

Road Intersections

2.7 The following road intersections shall be upgraded prior to the operation of any projects associated with this Concept Plan with the objective of improving or maintaining the performance of the intersections:

a) Industrial Drive/Ingall Street;
b) Industrial Drive/George Street; and
c) George Street/Selwyn Street.

The upgrades shall be generally consistent with those outlined in Attachment B and shall be designed in accordance with the *Guide to Road Design 2009* (Austroads) (with RTA supplements), and *Traffic Signal Design 2008* (RTA) (or as subsequently updated), and shall be informed by appropriate intersection analysis.

The timing, staging, scope and design of the upgrades may be varied, subject to consideration of the matters outlined in requirement 2.9.

Rail Access

2.8 Rail access to and within the Concept Plan site shall be configured and operated to facilitate increased rail mode share to and from the site, to accommodate train operations to minimise physical and operational impacts on other rail operations within the vicinity of the site, and shall be generally consistent with the following listed infrastructure and operational scenarios:

a) a new rail line extended between the One Steel line and the Bullock Island loop to provide direct access to the site for Port trains and the provision of at least two x 650m length rail sidings to service 1,300m length trains; and
b) the use of an extended shunt neck on the Bullock Island loop approximately 700m beyond the new rail entry to the Port to provide for trains to entering and exiting the site; and
c) provision for the reconfiguration of the Morandoo Yard (road numbers 1 to 5) to provide a total of four x 650m length rail sidings to hold two Port trains while a third train is within the rail sidings within the Concept Plan site.

Rail access consistent with this configuration shall be operational prior to total annual truck ~~road container freight~~ movements exceeding ~~200,000 TEU~~ the limits identified in requirement 2.3 (Table 1) and total rail freight ~~container~~ movements exceeding ~~120,000 TEU~~ an average of 3 trains per day (i.e. 3 trains in and 3 trains out).

The timing, staging, scope and design of this rail infrastructure may be varied, subject to consideration of the matters outlined in requirement 2.9.

2.9 The final timing, staging, scope and design of the *Transport Infrastructure Upgrades* identified in requirements 2.6, 2.7 and 2.8 may be revised by subsequent project approvals, where the following matters, where relevant, have been considered:

a) In relation to road infrastructure:

i. the level of traffic generated by the operation of the project and the consideration of existing and approved development both on and adjoining the site (including the timing of approved development and access to these sites, where relevant);
ii. satisfactory performance of the intersections, including Level of Service, Degree of Saturation, and queue lengths;
iii. traffic management measures designed to reduce vehicle movements or distribute movements between the intersections;
iv. safe access between and to precincts both from within and outside the site, including the consideration of the *Port Emergency Response Plan*; and
v. consultation with Transport for NSW, the RMS, HDC, Council and adjoining land owners.

b) In relation to rail infrastructure:

i. the objective of increasing freight movement by rail to and from the Concept Plan site and the optimisation of rail operations;
ii. minimising the physical and operational impacts on other rail operations within the vicinity of the site;
iii. availability of additional freight train paths and capacity; and
iv. consultation with Transport for NSW, ARTC, rail operators within the vicinity of the site and adjoining land owners.

Transport Monitoring and Review

2.10 The Proponent shall undertake transport monitoring and review to assess compliance with this Concept Plan approval, subsequent project approvals and to inform transport planning, and the timing of transport infrastructure delivery, service provision and management measures associated with this Concept Plan.

The monitoring and review shall:

a) report on freight volumes, types and movements (road and rail) resulting from projects associated with this Concept Plan, including origin and destination surveys;
b) assess the performance of the road network, including the performance of the Industrial Drive/Ingall Street and Industrial Drive/George Street intersections and the mid block capacity of nominated heavy vehicle routes at a local and regional level;
c) assess the effectiveness of distributing heavy vehicle movements outside of peak traffic periods and the effectiveness of management measures to minimise heavy vehicles accessing residential areas;
d) assess the effectiveness of measures to improve non-vehicular employee access to the site and links to external networks;
e) assess the performance of utilised rail networks, and the use of available train paths; and
f) inform the timing of necessary road and rail infrastructure upgrades, service provision and management measures.

Should the monitoring and review identify a substantial non compliance with this Concept Plan Approval, and/or subsequent project approvals, the Proponent shall identify measures to be implemented to address the non compliance.

The monitoring shall be prepared in consultation with Transport for NSW, the RMS and Council and shall be undertaken prior to and one and five years following the commencement of any project (or the commencement of a modification to a project that results in increased transport movements) associated with this Concept Plan, or as otherwise directed or agreed by the Director-General.

The results of this monitoring and review shall be submitted to Transport for NSW, the RMS, Council and the Director-General within six months of the monitoring period. The monitoring and reporting program shall be integrated with the Compliance Tracking Program.

Air Quality

2.11 Projects associated with this Concept Plan approval shall be designed, constructed and operated with the objective of meeting the overall site pollutant performance criteria described in Table 11-6 (or as may be updated in the source documents), of the document referred to in requirement 1.1b), including the utilisation of industry accepted air quality management measures for the transport, handling and storage of pollutant sources.

Site Air Quality Model

2.12 The Proponent shall, prior to the lodgement or consideration of any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General, develop and maintain a *Site Air Quality Model* to facilitate the assessment of air quality impacts of projects and to report on compliance with the site pollutant performance criteria outlined in requirement 2.11.

The Model shall take into consideration pre-project background air quality and pollutant levels at receptors and shall be maintained until such time as the site is fully developed. Air quality monitoring data collected as part of the *Air Quality Monitoring Program* shall be incorporated into the Model to allow air quality emissions to be managed for the site as a whole and on a cumulative and progressive basis.

The Model shall be updated with details from subsequent project approvals and used to assess performance against the air quality performance criteria during the Concept Plan sites development.

Air Quality Monitoring Program

2.13 The Proponent shall develop and implement an *Air Quality Monitoring Program*, to outline how the air quality impacts, and in particular particulate matter impacts, of the projects associated with this Concept Plan approval will be monitored and proactively managed.

The Program shall be prepared by an appropriately qualified person(s) and shall include, but not necessarily be limited to:

a) identification of an air quality monitoring network and meteorological monitoring that can facilitate the monitoring of air pollutants at a project, precinct and Concept Plan site level,
b) locations, frequencies and methods for monitoring air pollutants, including total suspended particles, PM_{10} and deposited particulate matter;

c) the use of appropriate sampling or monitoring methods to measure air quality and pollutant parameters and a meteorological station consistent with requirement 2.14;
d) the utilisation of real-time monitoring data to inform environmental management decisions associated with the project;
e) a framework for identifying actual and potential air quality impacts, and for applying pro-active and reactive mitigation and management measures to address those impacts;
f) active engagement with the local community to address air quality issues;
g) provisions for reporting monitoring results to the Department and EPA (if requested) and for independent review and auditing of the Program (to be incorporated into the Compliance Tracking Program); and
h) mechanisms for updating the Program as may be required from time to time.

The Program shall be prepared in consultation with the EPA and submitted to the Director-General prior to the commencement of operations of any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

Meteorological Monitoring

2.14 The Proponent shall install, operate and maintain a meteorological monitoring station to monitor weather conditions representative of those on the site, in accordance with:
a) AM-1 Guide to Siting of Sampling Units (AS 2922-1987);
b) AM-2 Guide for Horizontal Measurement of Wind for Air Quality Applications (AS 2923-1987); and
c) AM-4 On-Site Meteorological Monitoring Program Guidance for Regulatory Modelling Applications.

The meteorological monitoring station shall be installed within or near the site and the Proponent shall use the meteorological monitoring station to facilitate the air quality monitoring required under this approval. This requirement does not preclude the Proponent from reaching agreement with any other relevant party for the installation, operation and maintenance of a shared monitoring station, or shared use of an existing monitoring station representative of the site, provided the outcomes of this requirement are achieved.

2.15 From the commencement of construction of any project associated with this Concept Plan approval, the Proponent shall continuously monitor, utilising the meteorological monitoring station required under this approval, for each of the parameters listed in Table ~~3~~ 4.

Table ~~3~~ 4 – Meteorological Monitoring

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	Mm	Continuous	1 hour	AM-4
Temperature at two metres	^{o}C	Continuous	15 minute	AM-4
Temperature at ten metres	^{o}C	Continuous	15 minute	AM-4
Wind speed at ten metres	m/s	Continuous	15 minute	AM-2 and AM-4
Wind direction at ten metres		Continuous	15 minute	AM-2 and AM-4
Sigma theta at ten metres		Continuous	15 minute	AM-2 and AM-4
Solar radiation	W/m^2	Continuous	15 minute	AM-4

Operational Noise

2.16 The proponent shall, within six months of the date of this approval, but prior to the lodgement or consideration of any project associated with this Concept Plan approval, unless otherwise agreed by the Director General, develop ~~maximum sound power levels for each precinct within~~ a Site Noise Model for the Concept Plan as described in requirement 2.19. The ~~maximum sound power levels~~ Site Noise Model shall be developed for the day, evening and night time periods to ensure that the amenity noise goals identified in Table ~~4~~ 5 below are met. The ~~maximum sound power levels~~ Site Noise Model shall be developed having regard to the noise assessment undertaken for the Concept Plan Environmental Assessment. ~~The levels shall be reported to the Director General and incorporated into the *Concept Plan Site Noise Model*.~~

2.17 Projects associated with the Concept Plan must comply with the amenity noise goals at sensitive residential receivers as detailed in Table ~~4~~ 5 below.

Table ~~4~~ 5 – Noise Goals at Nearby Residences

Location	Project Specific Noise Goals (dBA) $L_{Aeq\ period}$ (dBA)		
	Day (7.00 am to 6.00 pm)	Evening (6.00 pm to 10.00 pm)	Night (10.00 pm to 7.00 am)
A – 1 Arthur Street, Mayfield (Urban)	60	49	43
B – 2 Crebert Street, Mayfield (Urban)	60	50	43
C – 32 Elizabeth Street, Carrington (Urban)	57	44	45
D – Stockton (Suburban)	55	37	37

The above noise goals apply under winds of up to three metres per second (measured at 10 metres above ground level) and Pasquill stability class from A to F.

Note: To allow for cumulative noise generated by multiple projects under the Concept Plan, individual projects under the Concept Plan should not utilise all of the noise envelope specified by the criteria outlined in Table ~~4~~ 5.

2.18 The Proponent shall, in relation to any project associated with the Concept Plan ~~in the Container Terminal Precinct~~, assess and implement feasible and reasonable noise mitigation measures to reduce traffic noise impacts associated with the total Concept Plan (including total truck movement limits identified in Table 3 ~~container road freight movements up to 700,000 TEU)~~ on sensitive receivers where exceedances of traffic noise criteria have been predicted. The application of mitigation measures shall be consistent with the requirements of the *NSW Road Noise Policy* (DECCW, 2011).

Concept Plan Site Noise Model

2.19 The Proponent shall, prior to the lodgement or consideration of any project application associated with this Concept Plan, unless otherwise agreed by the Director-General, develop a *Concept Plan Site Noise Model* to facilitate the assessment of noise impacts and to report on compliance with project, precinct and Concept Plan noise criteria. The Noise Model shall take into consideration pre-project background noise levels at affected sensitive receivers and shall be maintained for the Concept Plan site until such time as the site is fully developed.

The Proponent shall ensure that any noise monitoring data collected as part of the *Noise Verification Monitoring Program* be incorporated into the Noise Model. The Noise Model shall be updated with details from each individual project and used to assess performance against the Concept Plan noise goals.

Noise Verification Monitoring Program

2.20 The Proponent shall develop a *Noise Verification Monitoring Program*, to outline how the noise impacts of the projects associated with this Concept Plan approval will be monitored and proactively managed. The Program shall include, but not necessarily be limited to:

a) identification of a noise monitoring network, consistent with the guidelines provided in the *Industrial Noise Policy* (EPA, 2000);
b) locations, timing and methods for monitoring noise impacts as operations commence for each project associated with the Concept Plan to assess compliance with precinct sound power levels, project specific noise criteria and Concept Plan noise goals, including identification of monitoring sites at which pre-project and post-project noise levels can be ascertained;
c) a framework for identifying actual and potential noise impacts, and for applying pro-active and reactive mitigation and management measures to address those impacts;

d) provisions for reporting monitoring results and complaints and enquiries received to the EPA and the Department and for independent review and auditing of the Program (to be incorporated into the Compliance Tracking Program); and
e) mechanisms for updating the Program as may be required from time to time, including a system that allows for the periodic assessment of industry accepted Management Practices and Available Technology Economically Achievable to satisfy the Concept Plan noise goals and the project specific noise criteria.

The Program shall be prepared by an appropriately qualified person(s) and shall be submitted to the Director-General prior to the commencement of operations for any project associated with this Concept Plan approval.

Hydrology

Stormwater Management Strategy

2.21 The Proponent shall prepare a *Stormwater Management Strategy* for the Concept Plan site to provide a framework for the coordinated management of storm water and flood risks across the site and within precincts and to facilitate the continual improvement in the quality of stormwater discharge to the South Arm of the Hunter River and a reduction in flooding impacts to land uses within and surrounding the site. The Strategy shall include:

a) the identification of water management risks, including flood risk, water quality and stormwater impacts, the isolation of stormwater from contaminated land and the local groundwater table, and the consideration of climate change and coastal risks;
b) design principles, objectives and environmental performance criteria for flooding, ground water, and storm water management, including the consideration of the following matters:
    i. the design and adoption of stormwater management measures that reflect site constraints, land use and catchment conditions;
    ii. the minimisation of runoff and the reduction of peak flows;
    iii. minimising coastal risks and flooding impacts for land uses within, adjoining and in proximity of the site, including the establishment of site design criteria for site levels and drainage capacity, and consideration of NSW seal level rise planning benchmarks;
    iv. integrating stormwater capture, treatment and reuse into the operating environment;
    v. improving surface and groundwater quality within the site and at discharge points.
c) conceptual site based flooding, storm water, surface water and water quality management measures, including standards for the protection and maintenance of these measures;
d) a monitoring program for surface and ground water which identifies parameters to be monitored, sampling locations, monitoring methods and sampling methodology, including frequency and duration of monitoring and sampling, responsibilities and reporting;

e) corrective action and contingency measures in the event of exceedances of the relevant environmental performance criteria;
f) process for regularly reviewing and updating the Strategy to identify continual improvement to procedures and to reflect ongoing the development of the site;
g) reporting procedures and protocols for evaluating performance; and
h) taking into account the *NSW Coastal Planning Guideline: Adapting to Sea Level Rise* (DoP, 2010), the Preliminary Stormwater Strategy (contained in Appendix H of the Environmental Assessment), *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), Council design criteria and the existing Hunter Development Corporation groundwater monitoring program.

The Strategy shall be prepared in consultation with Council, HDC, EPA and shall be submitted to the Director-General prior to the lodgement or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent shall update the Strategy, as required, following subsequent project approvals associated with this Concept Plan Approval.

Site Infrastructure

Utilities Infrastructure Plan

2.22 The Proponent shall prepare a *Utilities Infrastructure Plan* for the Concept Plan site to identify the services and utility infrastructure (ie non transport related infrastructure) that will be required for the site and each precinct, and to provide for the coordinated provision of this infrastructure. The Plan shall include, but not be limited to the following:

a) the expected site services/utility demand levels and infrastructure requirements, including reasonable contingencies, at a site and precinct level;
b) the identification of service corridors to and within the site, including at a precinct level, to facilitate the rationalisation of infrastructure provision and to minimise conflict with existing and future site operations, including the prioritisation of connecting services to trunk infrastructure facilities to be provided in the adjoining Intertrade Industrial Park and the provision of shore to ship power to berthed vessels (subject to the findings of the Shore Side Power Feasibility Report); and
c) the identification of when the required infrastructure will be required and the inclusion of an implementation schedule to indicate when infrastructure will be delivered and associated installation protocols.

The Plan shall be prepared in consultation with infrastructure and public utility authorities as well as adjacent landowners, including but not limited to HDC, AusGrid, Hunter Water Corporation, Jemena, RailCorp, RMS, Council, and telecommunication providers (as relevant).

The Plan shall be prepared and submitted to the Director-General prior to the lodgement of or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent shall be responsible for overseeing the implementation of the Plan and shall update it as required, following any subsequent project approvals associated with this Concept Plan approval.

Shore Side Power (cold ironing) Feasibility Report

2.23 The Proponent shall prepare a Shore Side Power (cold ironing) Feasibility Report, in consultation with the EPA, for shore side power on the landside areas adjacent to berths. The Feasibility Report shall be prepared by a suitably qualified person and shall include, but not be limited to:

a) a discussion of industry accepted environmental practice for Shore Side Power, including relevant international experience and standards;
b) consideration of feasible and reasonable measures that could be adopted at the berths, including the consideration and quantification of air quality and noise benefits; and
c) potential options and future recommendations, including the provision of service corridors for future infrastructure.

The Plan shall be prepared and submitted to the Director-General prior to the lodgement of or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General.

Hazards, Dangerous Goods and Chemical Storage

2.24 Potentially hazardous facilities of a project associated with this Concept Plan Approval shall be designed and sited with appropriate separation distances such that they do not cumulatively impact adjacent surrounding land uses at a precinct and Concept Plan site level in a manner exceeding permissible impact levels published in *Hazardous Industry Planning Advisory Paper No.4 – Risk Criteria for Land Use Safety Planning*, Department of Planning, January 2011.

2.25 The hazard safeguards (as applicable) listed in the Hazard Identification Table A.1, in Appendix A, of the report titled *Preliminary Hazardous Analysis, Mayfield Site Port-Related Activities Concept Plan*, dated 19 July 2010 and prepared by AECOM, shall be implemented.

Port Emergency Response Plan

2.26 The Proponent shall prepare a *Port Emergency Response Plan* for the Concept Plan site, precinct and project(s) prior to the commissioning of any projects associated with this Concept Plan approval that involve the transport, handling or storage of hazardous or dangerous materials. The Plan shall:

a) include detailed procedures for the safety of people on and off site who may be at risk from the project;
b) include provision for safe and fully accessible emergency service vehicle access to portside facilities;
c) consider any *Safety Management System* prepared for the project;
d) be updated prior the commissioning of any subsequent projects associated with this Concept Plan approval; and
e) be consistent with the *Hazardous Industry Planning Advisory Paper No.1 - Emergency Planning*, Department of Planning, January 2011.

The Proponent shall submit the Plan or any update of the Plan to the Director-General no later than two months prior to the commencement of any project associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent may elect to use an existing Plan should that Plan address the requirements of this Concept Plan approval.

Safety Management System

A *Safety Management System* shall be prepared prior to the commissioning of any project associated with this Concept Plan approval that involves the transport, handling or storage of hazardous or dangerous materials. The System shall cover on-site operations and associated transport activities involving the transport, handling or storage of hazardous and dangerous materials. The document shall:

a) specify safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures; and
b) be consistent with the *Hazardous Industry Planning Advisory Paper No.9 – Safety Management*, Department of Planning, January 2011.

The Proponent of future project applications under this Concept Plan approval shall submit the System to the Director-General no later than two months prior to the commencement of any project associated with this Concept Plan approval, or as otherwise agreed by the Director-General. Records shall be kept on site and shall be available for inspection by the Director-General upon request.

Hazard Audit

2.27 A *Hazard Audit* of each project associated with this Concept Plan approval that involves the transport, handling or storage of hazardous or dangerous materials shall be undertaken twelve months after the commencement of operations and every three years thereafter, or at such intervals as the Director-General may agree.

The audits shall be carried out 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 of future project applications under this Concept Plan approval shall submit each audit to the Director-General within one month of the audit being undertaken. The three yearly site Hazard Audits for each project associated with this Concept Plan approval shall be consolidated.

Social and Economic

2.28 Projects associated with this Concept Plan Approval, shall be subject to section 94A development contribution levies consistent with rates identified in the *Section 94A Development Contributions Plan 2009*, The City of Newcastle, March 2011 (or as subsequently updated), or as otherwise agreed with Council.

3. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

3.1 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

Provision of Electronic Information

3.2 The Proponent shall establish and maintain a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with this 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:

b) information on the statutory context of the Concept Plan approval and the current implementation status of the project;
c) a copy of this approval, any related project approvals and any future modification to this approval;
d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project; and
e) details of the outcomes of compliance reviews and audits of the project.

Community Communication Strategy

3.3 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 local community (broader and local stakeholders) on the progress and the related environmental management 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 on the progress of the project;
d) procedures and mechanisms through which the Proponent can respond to any enquiries or feedback from stakeholders in 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 should include, but not necessarily be limited to:
i) transport and traffic monitoring and management;
ii) noise and vibration monitoring and management;
iii) air quality monitoring and management; and
iv) cumulative impacts

The Proponent shall maintain and implement the Strategy throughout the development of the Project. The Strategy shall be submitted to the Director-General prior to the lodgement of any project application or commencement of works associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

4. COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

4.1 The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall include, but not necessarily be limited to:
a) provisions for periodic review of the compliance status of the Concept Plan and associated projects 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;
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*; and
e) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance.

The Program shall be submitted to the Director-General for approval prior to the lodgement of approval for any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

Attachment A – Heavy Vehicle Route

Attachment B – Road Intersection Upgrades

Works required at the Industrial Drive/Ingall Street Intersection

Ingall Street (Southern Leg)
- The southern leg approach shall be reconfigured to provide a channelized/signalised left turn lane and a single through lane. The southern leg departure shall be maintained as a single lane.
- The left turn lane shall be a minimum 120 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the southern leg.

Industrial Drive (Eastern Leg)
- The eastern leg approach shall be maintained to provide a left turn lane, two through lanes and a right turn lane. The eastern leg departure shall be maintained as two lanes.
- The right turn lane shall be extended to a minimum 140 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the eastern leg.

Ingall Street (Northern Leg)
- The northern leg approach shall be reconfigured to provide a combined channelised/signalised left turn/through lane, and two right turn lanes. The northern leg departure shall be maintained as a signal lane.
- The median right lane shall be a minimum 50 metres in length, excluding taper.
- The left turn/through lane and central right turn lane shall extend back to the existing railway level crossing.
- A signalised pedestrian crossing shall be provided on the northern leg.

Industrial Drive (Western Leg)
- The western leg approach shall be reconfigured to provide a channelised/signalised left turn lane, two through lanes and a right turn lane. The western leg departure shall be maintained as two lanes.
- The left turn lane shall be a minimum 120 metres in length, including taper.
- The right turn lane shall be extended to a minimum 170 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the western leg.

Works required at the Industrial Drive/George Street Intersection

Industrial Drive (Southern Leg)
- The southern leg approach shall be maintained to provide a left turn lane, two through lanes and a right turn lane. The southern leg departure shall be maintained as two lanes.
- A signalised pedestrian crossing shall be provided on the southern leg.

George Street (Eastern Leg)
- The eastern leg approach shall be reconfigured to provide a channelised/signalised left turn lane, a through lane and a right turn lane. The eastern leg departure shall be reconfigured to provide a single lane at the throat of

the intersection. The auxiliary lane for the right turn into Selwyn Street shall be retained.
- The current left turn acceleration/merge lane shall be closed and reinstated to match the surrounding environment.
- The left turn lane shall be a minimum 50 metres in length, including taper.
- A central raised concrete median shall be provided.
- A signalised pedestrian crossing shall be provided on the eastern leg.

Industrial Drive (Northern Leg)
- The northern leg approach shall be reconfigured to provide a channelised/signalised left turn lane, two through lanes and a right turn lane. The southern leg departure shall be maintained as two lanes.
- The left turn shall be extended to a minimum 150 metres in length, including taper.

George Street (Western Leg)
- The western leg shall be maintained to provide a two approach lanes and a single departure lane.
- A signalised pedestrian crossing shall be provided on the western leg.

Works required at the George Street/Selwyn Street Intersection
- Move the Give Way line forward for vehicles exiting Selwyn Street.
- Provide a raised central concrete median/island in the throat of Selwyn Street to reinforce the prohibition of the right turn.

General Requirements
- Kerb and gutter and raised median/island kerbs shall be provided where required, as determined by the RMS.
- The intersections shall be designed to accommodate the turn path of the largest design vehicle (B-Double).
- Provision shall be made for on-road cyclists on all approaches and along the length of the proposed works.
- All lanes shall be 3.5 metres in width, or as determined by the RMS.
- Street lighting shall be provided in accordance with Australian Standard AS 1158 or as determined by the RMS.

APPENDIX A – INTENT OF THE MAYFIELD CONCEPT PLAN APPROVAL

Table 4 Statements of Intent Relating to the Mayfield Concept Plan Approval

Document Title	Section and Page No.	Quote
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	ES1 Section 1.5.2, p.11	The proposed concept would allow reasonable flexibility for future development of the five key land-based operational precincts allowing the detailed plans …….to evolve over the period through 2034.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	ES1 Section 1.5.2, p.11	The Concept Plan establishes broad parameters and environmental performance criteria to guide future development ……..
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	ES20 Section 4.6, p.48	…… Concept Approval for the proposed concept would set the broad parameters and environmental management framework within which subsequent project applications would be required to fit.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 3.2, p.33	The proposed concept recognises the port's trade forecasts whilst maintaining flexibility to adapt to changing trade forecasts and priorities over time. The proposed concept recognises the long lead times required in port planning and the potential for changes in the nature of trade over time.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 4.4, p.43 Section 5.1, p.52	…….. the boundaries between the five key land based operational precincts are approximate and may shift slightly in the future to provide flexibility in accommodating future trade needs.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 4.6, p.48	This approach also provides the necessary flexibility to accommodate changes in port planning and trade demand over the 25 year plus lifetime of the proposed concept.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 5.1, p.51	The proposed concept would enable NPC to retain appropriate flexibility in the long term development of the site and to ensure that development of the site occurs in a co-ordinated and efficient manner that promotes the highest and best use of the site for port uses, whilst minimising potential environmental impacts on interface activities ……
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 5.2, Tables 5-2, 5-3, 5-4 and 5-5	Note reference to 'Approximate volumes' (in column 2 of each table)

Document Title	Section and Page No.	Quote
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 5.3, p.63	Indicative staging for development of the proposed concept would be to a major extent reliant on trade demand and associated development investment within each precinct.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 5.3, Figure 5-2	Note title of Figure 'Indicative Staging of Operations by Precinct'
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 11.1.2, p.245	…… Concept Approval for the proposed concept would set the broad parameters and environmental management framework within which subsequent project applications would be required to fit. An important component of this framework is the development of environmental performance objectives to guide development of the site and the development of environmental performance criteria from which to measure the environmental performance of port related developments which would occur at the site over time.
Environmental Assessment for Mayfield Site Port Related Activities Concept Plan (AECOM July 2010)	Section 13.2, p.280	Concept Approval was selected as the appropriate approval mechanism because it establishes the strategic framework for progressive development of the site through to 2034, and would provide certainty for all stakeholders ……. that the site is suited for the intended port-related uses and that potential environmental impacts can be minimised and managed to acceptable levels. The Concept Plan aims to ensure that future development of the site occurs in a co-ordinated manner to promote the highest and best use of the site in accommodating trade forecast needs.
Director General's Major Project Assessment: NPC Port Terminal Facilities (March 2012)	Section 2.1, p.6	The boundaries of the precincts are indicative and approximate, subject to changes in the future to accommodate future trade needs and demands.
Director General's Major Project Assessment: NPC Port Terminal Facilities (March 2012)	Section 2.1, p.8	NPC has stated that the project is proposed to be developed progressively and therefore a high degree of flexibility is required due to likely changing port technology over time. The proponent envisages that future activity proposed on the site would be the subject of separate development applications to fit within the overall framework outlined by the environmental capacity of the site as determined by the current concept application.

Document Title	Section and Page No.	Quote
Director General's Major Project Assessment: NPC Port Terminal Facilities (March 2012)	Section 2.2, p.10	Given the scale and multiple components of the development, a Concept Plan approval would avoid a fragmented and ad hoc planning process for the site, and would also provide sufficient flexibility for the Proponent to consider project options within an overall envelope. Retaining flexibility in the later stages of the development would ensure that future development opportunities on the site remain responsive to market demands and the freight handling capacity of the Port.
Director General's Major Project Assessment: NPC Port Terminal Facilities (March 2012)	Section 6, p.69-70	The Concept Plan has a relatively long time span, and is to be developed progressively over a period of approximately 25 years. It provides a framework in which future development would operate. ……. The Department has recommended environmental assessment requirements to be considered in future development applications, as well as modifications of the Concept Plan, to ensure the operation of future development, when considered holistically, achieves acceptable environmental standards and protects public amenity.
Director General's Major Project Assessment: ICL Cement Terminal Project (June 2013)	Section 1.1, p.4	The approval also aims to develop the site in a co-ordinated and environmentally sustainable manner and establishes general land use precincts for the future industrial and port activities. The Mayfield Concept Plan site is being developed progressively and with on-going changes in port technology, requires a high level of flexibility to accommodate future trade needs and demand.
Director General's Major Project Assessment: ICL Cement Terminal Project (June 2013)	Section 1.5, p.9	The Mayfield Concept Plan aims to avoid a fragmented and ad hoc planning process and provide flexibility for the Proponent to consider project options within an overall envelope. The Mayfield Concept Plan provided a framework for the site including goals and criteria for noise and air quality impacts and traffic generation. NPC has stated that the project is proposed to be developed progressively and therefore a high degree of flexibility is required due to likely changing port technology over time.

Document Title	Section and Page No.	Quote
Director General's Major Project Assessment: Stolthaven Bulk Liquid Fuel Storage Facility Section 75W Modification (July 2013)	Section1, p.2	NPC's Mayfield Concept Plan is to be progressively developed based on demand. A high level of flexibility was afforded in the approval as port related technology is rapidly being developed and upgraded. All future developments proposed within the Concept Plan area would be the subject of separate development applications that must fit within the assessment envelope of the Mayfield Concept Plan approval.