

Project Approval

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

As delegate of the Minister for Planning, under delegation executed on 14 September 2011, the NSW Planning Assessment Commission approves the Project application referred to in Schedule A, subject to conditions in Schedule B.

These conditions are required to:

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



Brian Gilligan (Chair)
Member of the Commission



Robyn Kruk AM
Member of the Commission



John Cook
Member of the Commission

Sydney

30 September 2015

SCHEDULE A

Application No:

10_0215

Proponent:

Port Waratah Coal Services Limited

Approval Authority:

Minister for Planning

Land:

Lot 63 DP 1184943, Lot 1 DP 590032, Lot 13 DP 1097330, Lot 1 DP 775771, Lot 1,2,3&8 DP 775774, Lot 1 DP 608317, Lot 23 DP 1155723; Lot 1 DP 775775, Lot 11 DP 841542, Lot 1 DP 869622, Lot 121 DP 874949, Lot 18 DP 1119752, Lot 1 DP 1097327, Lot 16 DP 262783, Lot 1001 DP 1178025, Lot 1, 9, 10&11 DP 1119752, Lot 7&8 DP 1119752 (part), Lot 29&33 DP 1184229.

Biodiversity Sites: Lot 1002 DP1127780 (Tomago Offset Site); Lot 1 DP 1168335 (Ellalong Lagoon); Lot 21 DP 1194601, Lot 2 DP 725979, Lot 4 DP 738643, Lot 1 DP 725982, Lot 2 DP 725980, Lot 1&2 DP 514111 (Brundee Offset Site).

Project:

Construction and operation of a coal export terminal with capacity of up to 70 million tonnes per annum (calculated for each calendar year), including:

- contamination management and remediation works;
- site preparation ground treatment including pre-loading for foundation with sand dredged from the Hunter River South Arm;

- rail and coal receival infrastructure comprising of up to four arrival tracks; two dump stations and up to four departure sidings;
 - up to four coal stockpile pads and associated machinery for stacking and reclaiming;
 - wharf and berth infrastructure for up to two shiploaders and berthing for up to three ships;
 - coal conveyors, feeders and transfer stations;
 - associated infrastructure including roads, electricity supply, water supply, relocation of a high pressure gas pipeline to the north of the site, dust suppression, firefighting systems, fences, amenities, landscaping, car parks, water management infrastructure and temporary facilities;
 - habitat restoration and creation works at Tomago biodiversity offset site; and
 - biodiversity offset sites at Ellalong Lagoon, Brundee and Tomago.
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DEFINITIONS

Act, the	<i>Environmental Planning and Assessment Act, 1979.</i>
Ancillary Facility	Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile area.
ARI	Average Recurrence Interval
ARTC	Australian Rail Track Corporation
Brundee Biodiversity Site	Land within the Sydney Basin Bioregion, approximately 250 kilometres south of the Project. Land includes some 204 hectares adjoining the Brundee Swamp Nature Reserve, near Nowra in the Shoalhaven LGA, part of this project approval.
BCA, the	Building Code of Australia.
Conditions of Approval	The Minister's conditions of approval for the Project.
Construction	Includes all work in respect of the Project other than: <ul style="list-style-type: none"> a) survey, acquisitions, building/ road dilapidation surveys; b) investigative drilling, excavation, or salvage; c) minor clearing or translocation of native vegetation; d) establishing ancillary facilities/ construction work sites (in locations meeting the criteria identified in the Conditions of Approval); e) installation of environmental impact mitigation measures, fencing, enabling works; f) other activities determined by the Environmental Representative to have minimal environmental impact (e.g. minor access roads, minor adjustments to services/ utilities, etc). <p>Note - work where heritage, threatened species, populations or endangered ecological communities would be affected by that work is classified as construction, unless otherwise approved by the Secretary in consultation with the Office of Environment and Heritage.</p>
Deep Pond	As shown in the figure in Appendix 2
Department, the	Department of Planning & Environment, formerly the Department of Planning and Infrastructure.
DPI	Department of Primary Industries, includes the divisions of NSW Office of Water (NOW), Fisheries NSW, Agriculture NSW and Crown Lands.
EA	Environmental Assessment
EEC	Endangered ecological communities
Ellalong Lagoon Biodiversity Site	Land located 40 kilometres west of the Proposal, which comprises 409 hectares including 35 hectares of Freshwater Wetland EEC approximately 135 hectares of known Australasian bittern habitat, part of this project approval.
Enabling Works	Works which allow isolation of the Site so that access for construction can be provided.
EPA	Environment Protection Authority
EPL	Environment Protection Licence under the <i>Protection of the Environment Operations Act 1997</i>
FDF	Fines Disposal Facility
Heritage	Encompasses both Aboriginal and historic heritage including sites that predate European settlement, and a shared history since European settlement such as shared associations in pastoral landscapes as well as associations linked with the mission period.
Heritage Item	An item as defined under the <i>Heritage Act 1977</i> , and assessed as being of local, State and/ or National heritage significance, and/or an Aboriginal Object or Aboriginal Place as defined under the <i>National Parks and Wildlife Act 1974</i>
KCT	Kooragang Coal Terminal
KIWEF	Kooragang Island Waste Emplacement Facility
Life of the impact	Includes impacts from the construction, operation and decommissioning stages
Minister, the	Minister for Planning.
Mtpa	Million tonnes per annum.
NCIG	Newcastle Coal Infrastructure Group
OEH	Office of Environment and Heritage.
Operation	Means the operation of the Project, but does not include commissioning trials of equipment or temporary use of parts of the Project during construction.
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Project	Means the Project approved under this approval and as generally described in Schedule A.
Proponent	Port Waratah Coal Services Limited
Publicly available	Available for inspection by a member of the general public (for example available on an internet website).
Relevant council(s)	The City of Newcastle, Port Stephens, Cessnock and Shoalhaven City where relevant.
Reasonable and Feasible	Consideration of best practice taking into account the benefit of proposed measures and their technological and associated operational application in the NSW and Australian context. Feasible relates to engineering considerations and what is practical to build. Reasonable relates to the application of judgement in arriving at a decision, taking into account mitigation benefits and cost of mitigation versus benefits provided, community views and nature and extent of

	potential improvements.
	Where requested by the Secretary, the Proponent shall provide evidence as to how reasonable and feasible measures were considered and taken into account.
Roads authority	For example, Roads and Maritime or Council as relevant.
Secretary, the	The Secretary of the Department of Planning and Environment.
Secretary's approval, agreement or satisfaction	A written approval from the Secretary (or nominee). Where the Secretary's approval, agreement or satisfaction is required under a condition of this approval, the Secretary will endeavour to provide a response within one month of receiving an approval, agreement or satisfaction request. The Secretary may ask for additional information if the approval, agreement or satisfaction 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.
Sensitive receiver	Residential premises, schools, hospitals, places of worship, parks and wilderness areas.
Site	The land on Kooragang Island on which the fourth coal terminal, the subject of this approval, is situated.
Swan Pond	As shown in the figure included in Appendix 2
Tomago Biodiversity Site	Land approximately 2 kilometres north of the Project, known as Lot 1002 DP1127780, part of this project approval.

SCHEDULE B CONDITIONS OF APPROVAL

PART A ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

- A1. In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the Project.

Terms of Approval

- A2. The Proponent shall carry out the Project generally in accordance with the:
- (a) Major Project Application MP10_0215;
 - (b) T4 Project Environmental Assessment (EMM EMGA, February 2012);
 - (c) T4 Project Response to Submissions and Preferred Project Report (EMM EMGA, September 2013);
 - (d) T4 Project Response to Submissions on Preferred Project (EMM EMGA, January 2014); and
 - (e) conditions of this approval.
- A3. If there is any inconsistency between the plans and documentation referred to in condition A2, the most recent document shall prevail to the extent of the inconsistency. However, conditions of this approval prevail to the extent of any inconsistency with any plan or documents referred to in condition A2 or prepared as a result of this approval except where this approval explicitly allows it.
- A4. The Proponent shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:
- (a) any reports, plans or correspondence that are submitted in accordance with this approval; and
 - (b) the implementation of any actions or measures contained within these documents.

Limits of Approval

- A5. This approval shall lapse five (5) years after the date on which it is granted unless construction, the subject of this Project approval, has substantially commenced on or before that date.
- A6. The Proponent shall, prior to the commencement of construction and within two (2) years of the date of this approval, prepare and submit to the Secretary for approval, a **Site Management Plan** for the project site. The **Site Management Plan** shall :
- (a) be prepared in consultation with OEH, the EPA, relevant councils, the Commonwealth Department of Environment, NSW Fisheries (DPI), the Hunter Development Corporation and the Local Land Services (Hunter);
 - (b) include actions to be implemented to minimise further degradation of environmental values of the site, with particular consideration given (but not limited) to:
 - (i) measures to contain and treat (where appropriate) contamination ahead of any decision to proceed to construction; and
 - (ii) biodiversity values of both the site and the Hunter Estuary Ramsar Site, in particular its ecological character description; and
 - (iii) amending the stockyard layout, for example to provide sufficient space to adequately capture and contain stormwater runoff from the site and to retain Deep Pond as a freshwater system; and
 - (c) include a **Priority Action Statement** which commits to the actions that are to be completed within five years (5) of the date of this approval.

The **Site Management Plan** must be implemented upon receipt of the Secretary's

approval and be reviewed at least annually. The Plan is to remain in place until such time as the actions are completed on the site. Once approved by the Secretary, the Proponent shall ensure the Plan is made publicly available on a suitable website, and that the website is kept up-to-date with details of its implementation.

The completion of the works associated with the priority actions identified in the **Priority Action Statement** shall be deemed to constitute substantial commencement of construction for the purposes of condition A1 above. If the priority actions are not completed prior to the lapse date identified in condition A5., then this approval will be deemed to have lapsed.

** Notes:*

1. *Nothing in this condition requires the Proponent to remediate or cap any portion of the site which it does not own or hold a legally binding agreement to manage; or to which a current and enforceable Approval of the Surrender of Licence is held by a third party.*
2. *Nothing in this condition prevents the implementation of approved remediation works on any part of the site.*

Staging

- A7. Construction to create the compensatory migratory shorebird habitat at the Tomago Offset Site must be completed prior to the commencement of construction at the Site which would impact on migratory shorebird habitat and in accordance with an approved Biodiversity Offset Package required under condition B27.
- A8. The upgrade to the existing Cormorant Road and Pacific National Road T-intersection and the Cormorant and NCIG Wharf Access Road T-intersection to a four leg traffic signal controlled intersection is to be completed prior to construction commencing on the site.
- A9. The Proponent may elect to construct and/ or operate the Project in stages. Where staging is proposed, the Proponent shall submit a Staging Report to the Secretary prior to the commencement of the first proposed stage. The Staging Report shall provide details of:
- (a) how the Project would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and
 - (b) details of the relevant conditions of approval, which would apply to each stage and how these shall be complied with across and between the stages of the Project.

Where staging of the Project is proposed, these conditions of approval are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).

The Proponent shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Secretary prior to the commencement of each subsequent stage, identifying any changes to the proposed staging or applicable conditions. The Proponent shall ensure that all plans, sub-plans and other management documents required by the conditions of this approval and relevant to each stage (as identified in the Staging Report) are submitted to the Secretary no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Secretary.

Staged Submission of Plans or Programs

- A10. With the approval of the Secretary, the Proponent may:
- (a) submit any strategy, plan or program required by this approval on a progressive basis; and/or
 - (b) combine any strategy, plan or program required by this approval.

- A11. Any strategy, plan or program approved for the operation of the Project must continue to be implemented:
- (a) until replaced by an equivalent strategy, plan or program approved in accordance with this approval; or
 - (b) until the agreed and specified timeframe for its implementation has lapsed; or
 - (c) upon confirmation from the Secretary that implementation of any strategy, plan or program is no longer required.

Statutory Requirements

- A12. The Proponent shall ensure that all licences, permits and approvals are obtained and maintained as required throughout the life of the Project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the Site at all times during the Project.

Operation of Plant and Equipment

- A13. The maximum export capacity of the Project shall be limited to a coal throughput of 70 million tonnes of coal per annum, calculated for each calendar year.

Compliance

- A14. In the event of a dispute between the Proponent and a public authority, in relation to an applicable requirement in this approval or relevant matter relating to the activity, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute shall be final and binding on the parties.

Voluntary Planning Agreement

- A15. Prior to the commencement of construction, the Proponent shall enter into a Voluntary Planning Agreement (VPA) with The City of Newcastle Council in accordance with the terms of the Proponent's offer in Appendix 1.
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PART B ENVIRONMENTAL PERFORMANCE AND MONITORING

AIR QUALITY

Odour

- B1. The Proponent shall not permit any offensive odour, as defined under section 129 of the *Protection of the Environment Operations Act 1997*, to be emitted beyond the boundary of the Site.

Dust Management

- B2. The Project shall be designed, constructed and operated to minimise dust emissions to the greatest extent practicable, including fugitive dust emissions from plant, equipment and traffic from the Site and the Tomago Offset Site.
- B3. The Proponent shall comply with any air quality limits imposed in an EPL and/or pollution reduction program applied to the site.
- B4. As soon as practicable after the placement of fill/ preloading material on the Site, and subject to construction sequencing, the Proponent shall cover, seal, grass or otherwise treat or manage the Site to minimise the potential for wind-blown dust from the fill/ preload material. The Proponent shall maintain the cover, seal, grass or other treatment or management measure for the duration of Site preparation and preloading activities, and following the addition of further fill/ preload materials that may occur from time to time during that period.
- B5. The Proponent shall prepare and implement an air emissions mitigation plan for the project, to the satisfaction of the Secretary. The plan must:
- (a) be approved by the Secretary, in consultation with the EPA and NSW Health, prior to the commencement of construction, or installation, of any plant or equipment to be used during operations on the site;
 - (b) describe the air quality control equipment and technologies to be installed on the site, to minimise emissions from both direct onsite sources and associated ship and locomotive sources;
 - (c) demonstrate compliance with best practice and the use of best available technology;
 - (d) demonstrate the control measures would be sufficient to prevent exceedance of the relevant air quality standards **or** that there would be no net increase in particulate emissions from the Proponent's operations in the Port of Newcastle;
 - (e) demonstrate that the other air quality monitoring and management requirements set out in this approval are able to be achieved, and include a program for the development, implementation and updating of these plans.
- B6. The Proponent shall ensure that coal wagons leaving the site are completely empty, with dump doors fully closed and sufficiently clean so that there is no visible evidence of coal deposition on the ballast around the rail tracks from trains leaving the site.

Air Quality Monitoring

- B7. Prior to the commencement of dust generating plant or activities, the Proponent shall develop and submit for the approval of the Secretary, an **Air Quality Monitoring Program**, to specify how ambient air quality impacts of the Project will be monitored*. The Program shall include, but not necessarily be limited to:
- (a) a monitoring design to identify real time changes to air quality attributable to the Project; and
 - (b) locations, equipment, frequencies and methods for monitoring total suspended particles, PM₁₀, PM_{2.5} and deposited particulate matter in accordance with the

requirements of this approval and any Environmental Protection Licence issued by the EPA for the Project.

** Note: This condition 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 monitoring network, or shared use of an existing monitoring station or monitoring network provided the outcomes of this condition are achieved.*

- B8. Results from the Air Quality Monitoring Program in condition B7, and implemented during operation, are to inform the environmental management decisions associated with the Project in accordance with the Air Quality Sub Plan in condition D5(a).
- B9. The Proponent must use its best endeavours to participate in the development and implementation of the Newcastle Local Air Quality Monitoring Network being implemented by the Environment Protection Authority.

Meteorological Monitoring

- B10. During the life of the Project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that, as relevant
- (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline; and
 - (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*.
- B11. Data obtained from the operation of the meteorological station in B10 is to inform the environmental management decisions associated with the Project in accordance with the Air Quality Sub Plan in condition D5(a).

Greenhouse Gas

- B12. The Proponent shall prepare and implement an Energy Efficiency Plan to the satisfaction of the Secretary. The plan must:
- (a) be submitted to the Secretary for approval prior to the commencement of operations;
 - (b) describe the reasonable and feasible measures that would be implemented to minimise energy use and greenhouse gas emissions attributable to the Project;
 - (c) explore the possibility of using renewable energy use to generate power; and
 - (d) include a program to monitor the effectiveness of these measures; and
 - (e) include a protocol to periodically review the plan.

NOISE

Construction Noise

- B13. The Project shall be constructed with the aim of achieving the construction noise management levels detailed in the *Interim Construction Noise Guideline* (Department of Environment and Climate Change, 2009). All reasonable and feasible noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the CEMP.

Note: The Interim Construction Noise Guideline identifies 'particularly annoying' activities that require the addition of 5dB(A) to the predicted level before comparing to the construction NML.

Construction Hours

- B14. High noise generating activities resulting in impulsive or tonal noise emission (such as rock breaking, rock hammering, pile driving, dozer operation) shall only be undertaken:
- (a) between the hours of 7:00 am to 6:00 pm Monday to Friday (October to March) and 8:00 am to 5:30 pm (April to September);
 - (b) between the hours of 8:00 am to 4:00 pm Saturday; and

(c) in continuous blocks not exceeding three hours each with a minimum respite from those activities and construction works of not less than one hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a one hour respite between ceasing and recommencing any of the work the subject of this condition.

- B15. Wherever reasonable and feasible, piling activities shall be undertaken using quieter methods than impact or percussion piling, such as bored piles or vibrated piles.
- B16. The Project shall be constructed with the aim of achieving the following construction vibration goals:
- (a) for structural damage to heritage structures, the vibration limits set out in the *German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures*;
 - (b) for damage to other buildings and/or structures, the vibration limits set out in the British Standard BS 7385-1:1990 – *Evaluation and measurement for vibration in buildings. Guide for measurement of vibration and evaluation of their effects on buildings*; and
 - (c) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline* (Department of Environment and Conservation, 2006).

Operation Noise

- B17. The Proponent shall minimise noise emissions from plant, and equipment operated on the Site according to the principles outlined in the NSW Government's *Industrial Noise Policy*.

The Proponent shall ensure that the noise generated by the Project, in concert with noise generated by KCT, does not exceed the criteria in **Table 1** at any residence on privately-owned land at the nominated locations.

Table 1 – Maximum Allowable Noise Contribution (dB(A))

Location	At all times	Night only 10:00pm to 7:00am
	L _{Aeq} (15 minute)	L _{A1} (1 minute)
Fern Bay	50	55
Stockton	50	57
Mayfield	44	58
Carrington	42	52
Warabrook	37	54
Sandgate	37	55

Noise generated by the Project is to be measured in accordance with the relevant requirements and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

Appendix E of the *NSW Industrial Noise Policy* sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria. However, these criteria do not apply if the Proponent has an agreement with the relevant landowner to exceed the noise criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

- B18. The Proponent shall ensure that at any time when KCT is not operating, noise generated by the project does not exceed the noise limits in the **Table 2** at any residence on privately-owned land at the nominated locations.

Table 2 - Maximum Allowable Noise Contribution (dB(A)) - Terminal 4 only

Location	Day	Evening	Night		
	LAeq (15 minute)	LAeq (15 minute)	LAeq (15 minute)	LAeq (9 hour)	LA1 (1 minute)
<i>Fern Bay and Stockton</i>	49	49	49	46	55
<i>Mayfield West</i>	43	43	41	38	47
<i>Mayfield and Mayfield East</i>	43	43	42	38	48
<i>Carrington</i>	41	41	39	35	45
<i>Sandgate</i>	37	37	36	35	45
<i>Warabrook</i>	37	37	35	35	45

Note: For the purpose of this condition,

- *Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public Holidays;*
- *Evening is defined as the period 6pm to 10pm;*
- *Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public Holidays.*

- B19. The Proponent shall only accept locomotives that are approved to operate on the NSW rail network in accordance with noise limits specified in ARTC's Environmental Protection Licence (No. 3142) or a Pollution Control Approval issued under the former *Pollution Control Act 1970*.

Ports Precinct Noise Management

- B20. The Proponent must use its best endeavours to participate in the development and implementation of a precinct-wide noise map for the Port of Newcastle, should one be developed.

Note: The aim of a noise map is to establish an efficient, equitable and cumulative noise management, monitoring and reporting framework across the precinct. Development and implementation of any plan is not intended to alter the noise limits applicable to the project such that more stringent limits would apply.

BIODIVERSITY

Biodiversity

- B21. The Proponent shall employ a qualified ecologist(s) for the duration of construction works that have the potential to impact upon biodiversity values and including the establishment of the Tomago Offset Site. The ecologist(s) and their involvement period shall be approved by the Secretary. The ecologist shall advise on the mitigation and management of impacts to listed threatened and/or migratory species that may be affected by the relevant construction. This role will include, but will not be limited to, overseeing and administering works as required within the Construction Flora and Fauna Management Plan required under condition C1.
- B22. Prior to the commencement of construction at the Site, the Proponent shall prepare and implement an **Onsite Green and Golden Bell Frog Management Plan** for the constructed habitat on Kooragang Island. The Plan shall include detail of the known

functioning habitat on the Site, construction to be undertaken and timing of construction to ensure that functioning habitat is maintained on the Site at all times. This Plan shall be prepared in consultation with the OEH and Commonwealth Department of the Environment and submitted to the Secretary for approval. During operations, this would form part of the Operational Flora and Fauna Management Plan for the Site (See Condition D5(a)).

- B23. Construction that would directly impact on Swan Pond (i.e. installation of dredge return water channel) shall only be undertaken between April and August (inclusive).
- B24. The Proponent shall design *and* construct relevant rail infrastructure associated with the Project to include culverts, underpasses or other similar measures to facilitate the movement of *Litoria aurea* (Green and Golden Bell Frog) under the rail embankment, and shall consider existing and proposed frog habitat, movement corridors and protection from predators. The design shall be prepared in consultation with the Commonwealth Department of the Environment, OEH and NCIG.
- B25. The Proponent shall construct and maintain, to a standard that provides habitat (including sheltering habitat) suitable for *Litoria aurea*, a series of permanent, artificial water bodies with aquatic or semi-aquatic vegetation, with features similar to the 'trial ponds' on the Proposal site. They shall:
- (a) provide connectivity between the KCT rail loop and the existing pond parallel to the southern portion of Pacific National Access Road (Trench Pond);
 - (b) be designed in consultation with a qualified ecologist, the Commonwealth Department of the Environment and OEH; and
 - (c) be monitored to determine habitat use by *Litoria aurea* shall be provided to both the Commonwealth Department of the Environment and OEH.
- B26. All employees and contractors involved in construction or operation of components of the Project in areas known or suspected of providing habitat for *Litoria aurea* and other amphibian species shall be trained in site hygiene management in accordance with the *Hygiene Protocol for the Control of Disease in Frogs* (NPWS, 2001) as part of site induction training.

Biodiversity Offset Strategy

- B27. Prior to the commencement of construction, the Proponent shall develop and submit for the approval of the Secretary, a Biodiversity Offset Strategy to detail how habitat and ecological values lost as a result of the Project will be off-set and description of monitoring that will be undertaken to inform on-going ecological management, key performance criteria that will be monitored to ensure appropriate long-term adaptive management and appropriate timeframes within which the key performance criteria/objectives would be expected to be achieved. The Program shall be developed in consultation with the Commonwealth Department of the Environment (DotE), OEH, Local Land Services (Hunter), and shall include, but not necessarily be limited to:
- (a) detailed design of the Tomago Offset Site, including detailed descriptions of how the offset will be operated over time, in consultation with NSW Fisheries, EPA and Port Stephens Council, with peer review by a qualified ornithologist;
 - (b) details of the ongoing management, including any physical works at the Ellalong Biodiversity Site and Brundee Biodiversity Site and their purpose;
 - (c) provision for establishment of compensatory habitat for each of the significantly impacted ecological values of the Project (green and golden bell frog (*Litoria aurea*), Australasian bittern (*Botaurus poiciloptilus*) and migratory shorebirds), including:

- (i) securing, consolidating and managing the lands described as the 'Brundee Offset Site' in the RtS/PPR, in consultation with the Department, OEH and the Commonwealth Department of the Environment;
 - (ii) establishment of not less than 12 hectares of compensatory habitat (as part of the onsite green and golden bell frog corridor) for *Litoria aurea* across Kooragang Island, in consultation with the OEH and the Commonwealth Department of the Environment. The compensatory habitat shall include a mosaic of wetland, terrestrial and breeding habitat, which includes foraging, sheltering, and wintering habitat attributes and movement corridors, in order to maximise the potential reproductive output of the *Litoria aurea* population. A minimum of 4.7 hectares of this 12 hectares shall comprise wetland habitat also suitable for *Botaurus poiciloptilus*;
 - (iii) securing and consolidating the lands described as the 'Ellalong Lagoon' in the EA (Ellalong Lagoon Biodiversity Site), in consultation with the, OEH and the Commonwealth Department of the Environment;
 - (iv) the establishment of the Tomago Offset Site, as specified in Condition A7;
- (d) provision of funding for research into the population dynamics of *Litoria aurea* in and around Kooragang Island and for a captive breeding program;
 - (e) The proponent shall encourage and participate in any committee established to develop and implement an Integrated Kooragang Island Green and Golden Bell Frog Management Strategy to detail and integrate the collective management measures and strategies to maintain the viability of the population on Kooragang Island;
 - (f) consideration of coordinating compensatory and ameliorative works with similar requirements for other developments, including with respect to the development the subject of development consent DA-134-3-2003-i (dredging and remediation of the South Arm of the Hunter River) and NCIG CET Rail Flyover Modification (MP06_0009 MOD 2)*; and
 - (g) long-term protection of the offset sites are to be guaranteed through an appropriate conservation mechanism, in the first instance, offered to OEH for inclusion into the State's Reserve System subject to agreement of the Minister for the Environment.

** Note: Nothing in this condition precludes the Proponent from the requirement to provide compensatory habitat in accordance with this approval.*

- B28. The Proponent shall develop signage at the entry to the Hunter Wetlands National Park and within any onsite office building to inform the general public of the ongoing work regarding conservation of the green and golden bell frog (to raise awareness amongst the community).
- B29. In the event that the Project is modified such that it results in impacts to biodiversity different to those assessed in the documents referred to in condition A2, the Proponent is required to submit for the approval of the Secretary, a revised Compensatory Habitat and Ecological Monitoring Program (and any other ecological plans) at least two months prior to the additional impact occurring.

TRAFFIC AND TRANSPORT

General Road Infrastructure and Traffic Management

- B30. The Proponent shall design, install and maintain physical traffic control devices and signs for all prohibited traffic movements concerning site access and egress during construction and operation of the Project, as relevant. The Proponent shall submit design details of the traffic control devices and signs in consultation with Council to the satisfaction of RMS prior to their installation. Traffic control devices and signs shall be installed prior to the commencement of construction, as relevant, and at the expense of the Proponent.

- B31. All heavy vehicle access to and from the site shall be limited to the Cormorant Road and Pacific National Access Road intersection, as far as practicable. Alternative access requirements for heavy vehicles shall be detailed in the Traffic and Access Management Plan required in condition C2(g).
- B32. The Project shall be designed, constructed, maintained and operated:
- (a) so as not to preclude the future duplication of Tourle Street Bridge and Cormorant Road to accommodate four lanes of traffic;
 - (b) to ensure that stormwater drainage conditions and structures allow Cormorant Road /Tourle Street to remain trafficable during a 1 in 100 year storm event; and
 - (c) ensure that any property requirements including easements, acquisition and/or road reserve dedication are in accordance with the requirements of the RMS and Council and at the full expense of the Proponent.

The Proponent shall consult with the RMS during detailed design of the Project to ensure that the requirements of this condition are reflected in the final design of the Project and that all relevant approvals under the *Roads Act 1993* are obtained prior to construction.

Structural Assessment of Tourle Street Bridge

- B33. During detailed design, the Proponent shall commission a suitably qualified person, whose appointment has been agreed to by the Secretary in consultation with RMS, to conduct an independent assessment of the potential for the Tourle Street Bridge to be structurally impacted by a coal carrier ship (directly or by energy transfer through the river bed). The assessment is to:
- (a) validate design assumptions and friction parameters to determine the sensitivity on stopping distances; and
 - (b) quantify the forces transmitted into the river bed stratum using numerical modelling on the revetment.

The Proponent is required to implement any recommended additional mitigation measures to protect the structural integrity of the Tourle Street Bridge resulting from the independent assessment that the Secretary requires in consultation with RMS.

Road Works – Cormorant Road

- B34. The Proponent shall submit to the satisfaction of the RMS, detailed designs for the road works referred to in this condition prior to the commencement of construction of those works, and prior to the commencement of construction of the relevant components of the Project. These shall include:
- (a) the **Cormorant Road/Pacific National Access Road** four leg signalised intersection. The intersection design and configuration shall be based on , a revised traffic impact assessment report prepared in consultation with RMS and include consideration of lighting, pedestrian and cyclist requirements;
 - (b) the **stormwater drainage system** including the identification of easements required through the Site and to the Hunter River, and stormwater flows to Long Pond; and
 - (c) The Proponent shall ensure that the **conveyor bridge over Cormorant Road** is designed and constructed to include a minimum 6.5 metre vertical height clearance from the top of Cormorant Road pavement to the underside of the bridge structure and makes allowance for the future widening or duplication of Cormorant Road. The Proponent shall enter into an agreement with RMS for the ongoing maintenance and demolition of the bridge structure.

Rail Infrastructure and Management

- B35. The Proponent shall consult with ARTC, and meet the reasonable requirements of ARTC with respect to the design of the Project, for those components of the Project that may affect the design, connection and operation of existing and proposed ARTC rail infrastructure assets.

Shore Power

- B36. The Proponent shall provide spatial provision for shore power for vessels at berth as part of the Project.

UTILITIES AND SERVICES

- B37. The Proponent shall identify, prior to construction, utilities, services and other infrastructure potentially affected by construction and operation to determine requirements and make arrangements for access to, diversion, protection, and/or support. Owners and/or providers of services that are likely to be affected by the Project shall be consulted. The cost of any such arrangements shall be borne by the Proponent.

SOIL AND WATER QUALITY

- B38. The Proponent shall design, construct, maintain and operate surface water and stormwater management infrastructure on the Site to accommodate a 1 in 100 year (2 hour) Average Recurrence Interval (ARI) event with no surface water discharge to occur from the site unless provided for in an EPL.
- B39. Handling and deposition of wet sediment and dredge waters is only to be undertaken in areas of the site which have a low permeability land surface barrier (such as HDPE liner) and appropriate drainage such that the risk of interaction with groundwater and the fresh water ponds on the site are minimised as far as practicable.
- B40. The construction required to connect Mosquito Creek and Mosquito Creek tributary shall be designed in consultation with NSW Fisheries (DPI) and OEH. For construction required on NPWS Estate, appropriate approvals are to be obtained prior to the commencement of construction.
- B41. The Proponent shall re-model the stormwater flows at the Tomago Offset Site following the detailed design of the offset to confirm impacts to the surrounding catchment. This shall be undertaken in consultation with adjacent landholders including the Northbank Enterprise Hub, OEH, Port Stephens Council and The City of Newcastle Council.
- B42. The Proponent shall take all reasonable measures to prevent soil erosion and the discharge of sediments and pollutants from the Site during construction of the Project.
- B43. The Proponent shall install stormwater drains, stormwater ponds, settlement ponds and/or storage ponds and other erosion, sediment and pollution controls as may be appropriate to manage stormwater on the site of the proposed coal terminal. The Proponent shall maintain all erosion, sediment and pollution control infrastructure at or above design capacity for the duration of the Project and until such time as all ground disturbed has been stabilised and rehabilitated so that it is no longer a potential source of sediment.
- B44. Soil and water management measures consistent with *Managing Urban Stormwater - Soils and Construction Vols 1* (Landcom, 2004) and *Managing Urban Stormwater – Soils and Construction, Vol 2A: Installation of Services* (Department of Environment and Climate Change, 2008) shall be employed during construction to minimise soil erosion and the discharge of sediment and other pollutants to land and/or waters.

Operation Soil and Water Management

- B45. All stormwater and surface water management infrastructure on the Site intended to manage water during operations shall be lined with a low-permeability material to

minimise potential leakage. Collected stormwater shall be reused on Site for beneficial purposes such as the wetting of coal to reduce dust emissions from the Site.

- B46. In the event that stormwater runoff collection cannot meet the water demand of the Site, treated wastewater, where practicable and if available from the relevant water authority, shall be used preferentially over potable water for the purposes of dust control, unless otherwise agreed by the Secretary.
- B47. All machinery wash down waters and amenities wastewater shall be directed to a septic or equivalent storage system or to an appropriately licensed liquid waste disposal facility.

Fill/ Preload Material Specifications

- B48. Unless otherwise agreed by the Secretary, the Proponent shall only source clean materials for use in fill/preloading activities from the development the subject of development consent DA-134-3-2003-i (dredging and remediation of the South Arm of the Hunter River) and/ or from other locations in the quantities specified in the documents referred to in condition A2.

Where the Proponent seeks the agreement of the Secretary to use fill/preload materials from a different source than specified in the documents referred to in condition A2, the Secretary may require submission of additional information to demonstrate how the impacts from heavy vehicle movements will be adequately and appropriately mitigated and managed.

- B49. Unless otherwise agreed by the Secretary, fill/preload material sourced from development the subject of development consent DA-134-3-2003-i shall be transported and managed consistently with an approved Dredged Material Transport Strategy required by that development consent (condition B2.29 of that consent).

CONTAMINATED LAND MANAGEMENT

- B50. Prior to the commencement of construction on each contaminated part of the site, the Proponent is to finalise and submit the relevant Landfill Closure Plan, and Remediation Action Plan for that stage (prepared in accordance with the *Guidelines for Consultants reporting on Contaminated Sites* (NSW EPA 1997)) and the containment cell design for the approval of the Secretary. Works the subject of these plans may only commence with the approval of the Secretary. These are to include:

- (a) the final Contaminated Site Auditor's Site Audit Statement and Site Audit Report prepared by an auditor accredited under the *Contaminated Land Management Act 1997*. Measures to manage contamination on the Kooragang Island Waste Emplacement Facility shall be developed in consultation with the Port of Newcastle Lessor Pty Limited and the Port of Newcastle as Lessee.

The Site Audit Report and Site Audit Statement is to be submitted to the EPA at least one month prior to the commencement of construction, or as approved by condition A9; and

- (b) detailed consideration of how the requirements of any *Environment Protection Licence* or *Surrender Notice* applicable to the site will be complied with.
- B51. Capping works must be implemented and completed prior to any dredge material emplacement, preloading and/or construction at the site.
- B52. The Proponent shall engage an appropriately qualified person to audit the remediation, capping and construction phases of the former landfill sites (KIWEF, Delta EMD and FDF) against the commitments contained in the documents referred to in condition A2.

The auditor shall provide the Secretary and the EPA with quarterly reports on the disturbance and recapping of the waste emplacement area during construction. In the event of any deviation from the commitments made in the abovementioned documents,

prior approval should be sought from the EPA, and any deviation from the commitments shall be described in detail and reasons for the change provided and fully justified.

- B53. The Proponent shall ensure that any contaminated materials removed from the Site be directed to a waste management facility lawfully permitted to accept the materials.

Groundwater Monitoring and Management

- B54. Prior to the commencement of construction, the Proponent must develop, and submit for approval of the Secretary, a long-term groundwater monitoring program* developed in consultation with DPI(NOW):

- (a) to confirm predictions in the documents referred to in condition A2 and identify changes in groundwater quality from pre-construction groundwater conditions.
- (b) The groundwater monitoring program is to include an action plan to be implemented should groundwater quality trigger values be exceeded during the course of the monitoring program. The Proponent shall rectify any adverse impact on groundwater that may be detected and attributable to the Project. Groundwater monitoring must commence at least one month prior to the commencement of construction.

* Note: This condition does not preclude the Proponent from reaching agreement with any other relevant party for the installation, operation and maintenance of a shared groundwater monitoring bores, or shared use of an existing monitoring bores representative of the Site, provided the outcomes of this condition are achieved.

Waste Generation and Management

- B55. Waste shall be managed in accordance with the *Waste Avoidance and Resource Recovery Act 2001*.
- B56. All wastes generated on the site by construction or operation of the Project to be disposed offsite shall be assessed and classified in accordance with *Waste Classification Guidelines* (Department of Environment, Climate Change and Water, 2009), or any superseding document.
- B57. All waste materials removed from the Site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials.
- B58. Except as expressly permitted in an appropriate licence, waste shall not be received at the Site for storage, treatment, processing or reprocessing or disposal.

HAZARDS AND RISKS

- B59. Dangerous goods, as defined by the *Australian Dangerous Goods Code*, or any other hazardous substances, shall be stored and handled strictly in accordance with:
- (a) all relevant Australian Standards;
 - (b) for liquids, a minimum bund volume requirement of 110 per cent of the volume of the largest single stored volume within the bund;
 - (c) the *Storing and Handling Liquids: Environmental Protection, Participants* (Department of Environment and Climate Change, 2007); and
 - (d) the *Environment Protection Manual for Authorised Officers: Bunding and Spill Management, technical bulletin* (Environment Protection Authority, 1997).

In the event of an inconsistency between the requirements listed from B59(a) to B59(d) above, the most stringent requirement shall prevail to the extent of the inconsistency.

- B60. At least one month prior to the commencement of construction (except for construction that is outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Applicant shall prepare and submit for the approval of the Secretary, a **Final Hazard Analysis**. The FHA shall be prepared in accordance with the Department of Planning's *Hazardous Industry Planning Advisory Paper No 6. 'Hazard Analysis'*. The FHA shall report on the implementation of the recommendations of the

Preliminary Hazard Analysis and on compliance with *AS/NZS 4745:2012 Code of practice for handling combustible dusts*.

- B61. Prior to the commencement of construction of the Project, other than site preparation works, or as otherwise agreed by the Secretary, a **Fire Safety Study** shall be prepared. The Study shall cover relevant aspects detailed in the Department's publication *Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Guidelines* and the New South Wales Government's *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*. The Study shall include a strict maintenance schedule for essential services and other safety measures. The Study shall meet the requirements of the Fire and Rescue NSW.
- B62. Prior to the commencement of commissioning of the Project the following studies shall be prepared:
- a) a comprehensive **Emergency Plan** and detailed emergency procedures for the Development. The Plan shall be prepared in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 1 - Industry Emergency Planning Guidelines*; and
 - b) a **Safety Management System**, covering all on-site operations and any associated transport activities involving hazardous materials. The System shall clearly specify all safety-related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to safety procedures. The System shall be consistent with the Department's publication *Hazardous Industry Planning Advisory Paper No. 9 - Safety Management*.

VISUAL AMENITY IMPACTS

- B63. The Proponent shall ensure that all external lighting installed as part of the Project is mounted, screened, and directed in such a manner so as not to create a nuisance to surrounding land uses. The lighting shall be the minimum level of illumination necessary, and be in general accordance with the latest version of *AS 4282 – 1997 Control of the Obtrusive Effects of Outdoor Lighting*.
- B64. Advertising and Project identification signs shall not be installed along the Cormorant Road frontage of the Site.

COORDINATION OF ENVIRONMENTAL MONITORING AND MANAGEMENT

Coordinated Environmental Monitoring and Management Protocol

- B65. Prior to the commencement of operation, or within such period as otherwise agreed by the Secretary, the Proponent shall update the **Coordinated Environmental Monitoring and Management Protocol** to provide a framework for the coordinated and cooperative monitoring and management of environmental impacts from the developments Kooragang Coal Terminal, Newcastle Coal Infrastructure Group Coal Export Terminal and this Project.

The Protocol shall include, but not necessarily be limited to:

- (a) procedures for access to, and provision of, monitoring data from each development, particularly in relation to dust and noise emissions;
- (b) the respective remediation and redevelopment works;
- (c) arrangements for coordinated and cooperative monitoring of ambient environmental impacts, including agreements relating to sharing of monitoring networks/ infrastructure, coordinated interpretation of monitoring results and coordination dissemination of monitoring results to relevant parties;
- (d) measures to ensure a coordinated and cooperative approach to the management of common or cumulative environmental impacts from the developments;
- (e) arrangements for communication between the parties, including designated contact persons and contact details;

- (f) notification procedures in the event of an incident at either development that may impact on the other development, or generate a significant common or cumulative impact;
- (g) any agreement for participation in the development of any of the management plans or monitoring programs required under this approval;
- (h) mechanism for review of the Protocol from time to time; and
- (i) such other matters as parties may agree.

The Proponent shall provide a copy of the Protocol to the Secretary and the EPA and OEH as soon as practicable after agreement on the terms of the Protocol.

Coordination of Cumulative Dust Studies

B66. The Proponent shall participate in any cumulative dust study that may be commissioned by the EPA, unless otherwise agreed to by the Secretary. The extent of the Proponent's involvement in such a study shall be agreed with and to the satisfaction of the Secretary, and shall include, but not necessarily be limited to:

- a) provision of monitoring data associated with the environmental performance of the Project;
- b) provision of management and auditing documentation associated with the Project and relevant to the study;
- c) access to the Project and relevant technical and environmental experts associated with the Project where reasonable;
- d) arrangements for any financial contributions to cover the reasonable expenses associated with the study*; and
- e) such other matters as the Proponent and the Secretary may agree.

* NOTE: where the Proponent and EPA cannot come to a negotiated agreement as to the reasonable expenses associated with this study the Secretary can specify the amount to be contributed towards the study in consultation with the Proponent..

Coordination of Flood Studies

B67. The Proponent shall consult with the Northbank Enterprise Hub regarding management of stormwater flows from the Northbank Enterprise Hub site to the Tomago offset site to minimise impacts upon the Tomago Offset Site where possible.

PART C ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN

- C1. The Proponent shall prepare and implement a Construction Environmental Management Plan for the Project in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources 2004). No construction associated with the Project shall commence until written approval of this plan has been received from the Secretary. The Plan must:
- (a) be submitted to the Secretary for approval no later than one (1) month prior to the commencement of construction or demolition or within such period otherwise agreed by the Secretary;
 - (b) include the following Sub-plans:
 - (i) Air Quality Management Plan;
 - (ii) Contamination and Materials Management Plan;
 - (iii) Acid Sulphate Soil Management Plan;
 - (iv) Soil and Water Management Plan;
 - (v) Flora and Fauna Management Plan;
 - (vi) Heritage Management Plan (if required);
 - (vii) Noise and Vibration Management Plan; and
 - (viii) Traffic and Access Management Plan.

Note: A utility owner who is to undertake construction as part of this approved Project may use an existing Construction Environmental Management Plan where this plan meets the requirements of this condition.

- C2. The Proponent shall ensure that the following specific requirements are considered in developing the sub-plans or procedures identified in condition C1, but not limited to:
- (a) **Air Quality Management Plan** is to be developed in consultation with the EPA and Department of Health and is to include:
 - (i) the identification of all potential sources of dust emissions from the construction of the Project; and
 - (ii) all reasonable and feasible mitigation measures to be implemented to manage dust emissions on site during construction.
 - (b) **Contamination and Materials Management Plan**
 - (i) is to be developed in consultation with the EPA and where there are potential impacts to *Litoria aurea* (Green and Golden Bell Frog) OEH and DoE;
 - (ii) include procedures for the implementation of the Final Remediation Action Plan and integrated Landfill Closure Plan with the construction of the Project; and
 - (iii) details of proposed extraction, use and disposal of groundwater, and measures to mitigate potential impacts to groundwater sources, incorporating monitoring, impact trigger definition and response actions for all groundwater sources potentially impacted by the Project;
 - (iv) procedures for the identification and management of contaminated materials excavated from site during construction including a contingency plan to be implemented in the case of unanticipated discovery of contaminated material during construction.
 - (c) **Acid Sulphate Soil Management Plan** developed in consultation with the EPA and in accordance with the *Acid Sulfate Soil Manual* (Acid Sulfate Soil Management Advisory Committee, 1998) for areas with the potential to encounter Potential Acid Sulphate Soils or Actual Acid Sulphate Soils.
 - (d) **Soil and Water Management Plan** to manage surface and groundwater impacts during construction of the Project. The Plan shall be developed in consultation with OEH and NOW and include, but not necessarily be limited to:

- (i) details of construction activities and their locations, which have the potential to impact on water courses, storage facilities, stormwater flows, and groundwater, including details of proposed extraction, use and disposal of groundwater;
 - (ii) surface water and ground water impact assessment criteria consistent with Australian and New Zealand Environment Conservation Council (ANZECC) guidelines;
 - (iii) management measures to be used to minimise surface and groundwater impacts, including details of how dredge material will be handled, stockpiled, reused and managed; erosion and sediment control measures; salinity control measures and the consideration of flood events;
 - (iv) a description of how the effectiveness of these actions and measures would be monitored during the proposed construction, in accordance with the long-term groundwater monitoring program required under condition B54, clearly indicating how often this monitoring would be undertaken, the locations where monitoring would take place, how the results of the monitoring would be recorded and reported, and, if any exceedance of the criteria is detected how any non-compliance can be rectified; and
- (e) **Flora and Fauna Management Plan** to detail how construction impacts on ecology of the Project will be minimised and managed. The Plan shall be developed in consultation with OEH, the Commonwealth Department of the Environment and relevant Councils and shall include, but not necessarily be limited to:
- (i) plans for impacted and adjoining areas showing vegetation communities; important flora and fauna habitat areas; locations where threatened species, populations or ecological communities have been recorded; including pre-clearing surveys to confirm the location of threatened flora and fauna species and associated habitat features;
 - (ii) the identification of areas to be cleared and details of management measures (such as fencing, clearing procedures, removal and relocation of fauna during clearing, habitat tree management and construction worker education) to avoid any residual habitat damage or loss and to minimise or eliminate time lags between the removal and subsequent replacement of habitat. Specifically, temporary fencing is to be placed around the construction footprint and no vegetation is permitted to be directly or indirectly affected outside of this boundary;
 - (iii) rehabilitation details, including identification of flora species and sources, and measures for the management and maintenance of any rehabilitated areas;
 - (iv) weed management measures focusing on early identification of invasive weeds and effective management controls;
 - (v) a description of how the effectiveness of these management measures would be monitored; in consultation with OEH;
 - (vi) a procedure for dealing with unexpected EEC/ threatened species identified during construction, including cessation of work and notification of the OEH, determination of appropriate mitigation measures in consultation with the OEH (including relevant re-location measures) and updating of ecological monitoring and/ or biodiversity offset requirements;
- (f) **Noise and Vibration Management Plan** developed and implemented in accordance with the Interim Construction Noise Guidelines (DECC, 2009e); and
- (i) identification of feasible and reasonable measures to be implemented to minimise and manage construction noise and vibration impacts, including noise from traffic;
 - (ii) a description of how the effectiveness of these actions and measures would be monitored during the proposed construction.

- (g) **Traffic and Access Management Plan** is to be developed in consultation with the RMS and Council and include:
- (i) all construction traffic control measures to be implemented for the Project including those required for internal access roads and the intersection upgrade required under condition B34(a);
 - (ii) details of the measures to manage construction traffic during peak times including measures to stagger traffic and the Shuttle Bus routes and pick up points;
 - (iii) details of the location and design of all onsite / offsite car parking areas including Shuttle Bus pick up points; and
 - (iv) a Vehicle Movement Plan that details construction traffic volumes, routes and access to and from the site.

ANNUAL REVIEW

- C3. To compare the actual performance of the Project against this approval, annually from date of this approval (or other timing as may be agreed by the Secretary), the Proponent shall prepare a summary of the environmental performance of the Project during construction and operation, for the previous 12 months and cumulatively to date, to the satisfaction of the Secretary. The summary must:
- (a) describe the activities carried out in the previous year, and those proposed for the following year;
 - (b) include a summary of monitoring results and complaints records of the previous year, including consideration of these results against:
 - (i) the conditions, relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this approval;
 - (iii) the monitoring results of previous years; and
 - (iv) the relevant predictions in the documents identified in conditions A2;
 - (c) identify any non-compliance over the previous year and describe the actions taken (or being taken) to ensure compliance;
 - (d) identify any trends in the monitoring data over the life of the development;
 - (e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
 - (f) identify measures that could be implemented to improve the environmental performance of the development and justification for any decision to not implement those measures.

Note: it is not intended for this annual review to result in any additional review of plans, programs and strategies, where those plans, programs and strategies also have a review component that addresses this condition.

REVISION OF STRATEGIES, PLANS AND PROGRAMS

- C4. Within 3 months of the submission of an:
- (a) annual review under condition C3 above;
 - (b) incident report under condition C8 below;
 - (c) audit report under condition C10 below; or
 - (d) any modification to the conditions of this approval,
- the Proponent shall review, and if necessary revise, strategies, plans and programs required by this approval to the satisfaction of the Secretary.

Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.

REPORTING

Compliance Reports

- C5. The Proponent shall prepare a Pre-Construction Compliance Report and a Pre-Operation Compliance Report to report compliance with the requirements of this approval prior to the commencement of construction and operation, as relevant. The Reports shall be submitted to the Secretary for approval at least one month prior to the commencement of construction, or each stage, or operation as relevant.

Hazard Compliance Reports

- C6. One month prior to the commencement of operation of the Project, the Proponent shall submit to the Secretary, a report detailing compliance with Conditions B60 to B62, including:
- (a) Dates of study/plan/system submission, approval, commencement of construction and commissioning; and
 - (b) Actions taken or proposed, to implement recommendations made in the studies/plans/systems.
- C7. Three months after the commencement of operation of the Project, the Proponent shall submit to the Secretary a report verifying that:
- (a) The Emergency Plan (See Condition B62a)) is being implemented and at least one emergency exercise has been conducted; and
 - (b) The Safety Management System (See Condition B62b)) is being implemented and records as required are being maintained.

Incident Reporting

- C8. The Proponent shall notify, at the earliest opportunity, the Environmental Representative, Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, which identifies measures which have or will be implemented to rectify the incident; a timeframe for implementation; and such further reports as may be requested.
- C9. The Proponent shall meet the requirements of the Secretary to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition C8 of this approval, within such period as the Secretary may require.

AUDITING

Independent Environmental Audit

- C10. Within two (2) years of the date of the commencement of construction, and annually thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project against the requirements of this approval. This audit must:
- (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
 - (b) assess the environmental performance of the Project to assess whether it is complying with the requirements in this approval (including any assessment, strategy, plan or program required under this approval or an EPL/s);
 - (c) review the adequacy of any approved strategy, plan or program required under the abovementioned approval to manage impacts of the Project; and
 - (d) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals or licences.

Note: This audit team must be led by a suitably qualified auditor, and include experts in biodiversity, air quality, noise, surface water and groundwater management and other fields as specified by the Secretary.

- C11. Within six (6) months of the completion of the audit identified in condition C10, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

Hazard audit

- C12. Twelve months after the commencement of operation and every three years thereafter, or at such intervals as the Secretary may agree, the Proponent shall commission an independent, qualified person or team to undertake a comprehensive Hazard Audit of the Project. Within one month of each audit, a report shall be submitted to the Secretary. The Hazard Audit shall be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 5 - Hazard Audit Guidelines* and report on compliance with *AS/NZS 4745:2012 Code of practice for handling combustible dusts*.

The audit shall include a review of the site Safety Management System and a review of all entries made in the incident register.

The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report.

ACCESS TO INFORMATION

- C13. Within three (3) months of the date of this approval, and as documents are progressively made available, or as otherwise agreed by the Secretary, the Proponent shall:

- (a) make copies of the following publicly available on its website:
- (i) the documents referred to in Condition A2;
 - (ii) all current statutory approvals and licences for the development;
 - (iii) all approved plans and programs required under the conditions of this approval;
 - (iv) a summary of the monitoring results relating to monitoring conducted under Part B of this approval, reported in accordance with any conditions of this consent, or any approved plans and programs;
 - (v) a summary of the complaints register, updated annually;
 - (vi) the annual reviews as required in Condition C3 of this approval;
 - (vii) any independent environmental audit of the Project as required by Condition C10, and the Proponent's response to the recommendations in any audit;
 - (viii) any other matter required by the Secretary; and
- (b) keep this information up to date, to the satisfaction of the Secretary.

ENVIRONMENTAL REPRESENTATIVE

- C14. Prior to the commencement of construction of the Project, or as otherwise agreed by the Secretary, the Proponent shall nominate, for the approval of the Secretary, a suitably qualified and experienced Environment Representative(s) that is independent of the design and construction personnel. The Proponent shall employ the Environment Representative(s) for the duration of construction and for at least 12 months after commencement of operation, or as otherwise agreed by the Secretary. The Environment Representative(s) shall:

- (a) provide advice to the Proponent and the Department in relation to the performance of environmental management of the Project;
- (b) monitor the Proponent's implementation of environmental management plans, monitoring programs and strategies required under this approval;

- (c) be responsible for considering and advising the Proponent on matters specified in the conditions of this approval, and other licences and approvals related to the environmental performance and impacts of the Project;
- (d) ensure that environmental auditing is undertaken in accordance with the approval or the Proponent's Environmental Management System(s) where one exists and has been accredited by the Secretary for use on the Project;
- (e) be given the authority to approve/reject minor amendments to the Construction and Operation Environment Management Plans. What constitutes a "minor" amendment shall be clearly explained in the CEMP and OEMP required under conditions C1 and D4;
- (f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and
- (g) be consulted in responding to the community concerning the environmental management and performance of the Project where resolution of points of conflict between the Proponent and the community is required.

COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

C15. A **Community Communication Strategy** shall be prepared and implemented to facilitate communication between the Proponent (and its contractor(s)), the Environmental Representative (see condition C14), the relevant council(s) and community stakeholders (particularly adjoining landowners) on the construction environmental management and operation of the Project. The Strategy shall include, but not be limited to:

- (a) identification of stakeholders to be consulted, including affected and adjoining landowners;
- (b) procedures and mechanisms for the regular distribution of information to stakeholders on construction progress and key environmental management issues. The Strategy shall detail on structure, scope, objectives and frequency of information distribution ;
- (c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Proponent and/or Environmental Representative in relation to the environmental management and delivery of the Project;
- (d) procedures and mechanisms for Proponent response to enquiries or feedback from stakeholders in relation to environmental management and delivery of the Project; and
- (e) procedures and mechanisms that would be implemented to resolve issues/disputes that may arise between parties on the matters relating to environmental management and the delivery of the Project. This may include the use of an appropriately qualified and experienced independent mediator.

The Proponent shall maintain and implement the Strategy throughout construction and operation.

COMPLAINTS AND ENQUIRIES PROCEDURE

C16. Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall ensure that the following are available for community enquiries and complaints for the duration of construction:

- (a) a 24 hour telephone number(s) on which complaints and enquiries about the Project may be registered;
- (b) a postal address to which written complaints and enquires may be sent;
- (c) an email address to which electronic complaints and enquiries may be transmitted; and
- (d) a mediation system for complaints unable to be resolved.

The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this approval.

- C17. Prior to the commencement of construction, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement a **Construction Complaints Management System** consistent with *AS 4269: Complaints Handling* and maintain the System for the duration of construction and operation of the Project.

Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained in a complaints register and included in the construction compliance reports required by condition C3 of this approval. The information contained within the System shall be made available to the Secretary on request.

PART D OPERATION ENVIRONMENTAL MANAGEMENT

OPERATIONAL NOISE REVIEW

- D1. Within 90 days of the commencement of operation of the Project, or as otherwise agreed by the Secretary, and during a period in which the Project is operating under normal operating conditions, the Proponent shall undertake a program to confirm the noise performance of the Project. The noise program shall include, but not necessarily be limited to:
- (a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with condition B17 of this approval;
 - (b) methodologies, locations and frequencies for noise monitoring;
 - (c) details of any complaints and enquiries received in relation to noise generated by the Project within the first 90 days of operation;
 - (d) an assessment of night-time use of audible alarm systems;
 - (e) a statement of whether the Site complies with noise limits outlined in condition B16; and
 - (f) any additional noise mitigation measures and timetables for implementation.
- D2. Within 28 days of conducting the noise monitoring referred to under condition D1 of this approval, the Proponent shall provide the Secretary and the EPA with a copy of the report. If the noise monitoring report identifies any non-compliance with the noise limits imposed under this approval (refer condition B16), the Proponent shall detail what additional measures would be implemented to ensure compliance, clearly indicating who would implement these measures, when these measures would be implemented, and how the effectiveness of these measures would be measured and reported to the Secretary.
- D3. The requirements of conditions D1 and D2 shall be repeated within 90 days of the commencement of operation of each stage of the Project

OPERATIONAL ENVIRONMENTAL MANAGEMENT

- D4. Prior to the commencement of operation, or as otherwise agreed by the Secretary, the Proponent shall prepare and implement (following approval) an **Operation Environmental Management Plan*** for the Project. The Plan shall outline the environmental management practices and procedures that are to be followed during operation, and shall be prepared in consultation with the EPA, OEH and DPI and in accordance with the *Guideline for the Preparation of Environmental Management Plans* (Department of Infrastructure, Planning and Natural Resources 2004). The Plan must:
- (a) be submitted to the Secretary for approval no later than one (1) month prior to the commencement of operation or within such period otherwise agreed by the Secretary;
 - (b) include the following Sub-plans and protocols:
 - (i) Flora and Fauna Management Plan;
 - (ii) Air Quality Management Plan;
 - (iii) Soil and Water Management Plan;
 - (iv) Noise Management Plan;
 - (v) Spontaneous Combustion Management Protocol; and
 - (vi) Coal Wagon Cleaning Protocol. ***

** Note: or an ISO accredited Environmental Management System, where the Proponent can demonstrate, to the satisfaction of the Secretary, that the requirements of this condition could be achieved by that ISO accredited Environmental Management System;*

*** Note that operation does not include any commissioning trials;*** The Coal Wagon Cleaning Protocol should include practices and procedures to ensure that Condition B6 is achieved.*

- D5. The Proponent shall ensure that the following specific requirements are considered in developing the sub-plans or procedures identified in condition D4, but not limited to:
- (a) **Flora and Fauna Management Plan**; to outline ongoing management of biodiversity values. This Plan shall include, but not necessarily be limited to:
 - (i) an **Onsite Green and Golden Bell Frog Management Plan** to include, but not be limited to:
 - I. criteria against which success of the onsite habitat corridor will be measured;
 - II. details of monitoring including frequency, locations and reporting;
 - III. means of determining appropriate management response(s) where criteria are not met.
 - (ii) a **Tomago Offset Site Ecological Management Plan** to include, but not be limited to:
 - I. the criteria against which continued success of the Tomago Offset Site will be measured;
 - II. details of monitoring including frequency, locations and reporting;
 - III. means of determining appropriate management response(s) where criteria are not met.
 - (iii) An **Ecological Management Plan** for the Brundee Biodiversity Offset Site and the Ellalong Lagoon Biodiversity Offset Site. This Plan should include
 - I. detail of the management of these sites to ensure conservation of species as presented within Condition B27 and as per the requirements of Condition A2 of this approval;
 - II. criteria to ascertain the success of the sites; and
 - III. management measures that would be implemented where criteria are not met.

This Plan shall be submitted to the Department for approval by the Secretary within 12 months of the date of this approval or any other time as agreed by the Secretary.

- (b) **Air Quality Management Plan** to outline monitoring, management procedures and measures to minimise dust emissions from the operation of the Project. The Plan shall include, but not necessarily be limited to:
- (i) identification of all dust emissions sources and key performance indicator(s) for dust management;
 - (ii) description of all reasonable and feasible reactive and predictive mitigation or response measures or procedures to be implemented to manage dust;*
 - (iii) procedures for applying pro-active and reactive mitigation and management measures to address actual or potential impacts identified through the monitoring completed in accordance with conditions B7 and B10;
 - (iv) procedures for reviewing the effectiveness of the mitigation and management measures to be undertaken if any non-compliance is identified by the monitoring results in conditions B7 including consideration of additional management and mitigation measures such as chemical suppressants where measures implemented are shown to be ineffective;
 - (v) provision for independent review and auditing of the implementation of the Plan; and
 - (vi) mechanisms for updating the Program as may be required from time to time and in response to results of other regional air quality studies.
- * Note: *this is to include details of mitigation measures to be implemented including which and when components would be shut down to minimise emissions*
- (c) **Water Management Plan**; to outline the water management system for the Site. The Plan shall include, but not necessarily be limited to:
- (i) predicted Site water balance including the water supply system;
 - (ii) details regarding water management structures such as settling ponds and water tanks;
 - (iii) locations and design specifications for all water diversions from undisturbed runoff areas including channel design and stabilisation, sediment retention storages and other structures;
 - (iv) details on the internal drainage system including bunding, drainage channels, dewatering sumps and any pipelines;
 - (v) procedures for the management of groundwater on Site including any dewatering facilities and in response to the results from the long term groundwater monitoring program required in condition B54; and
 - (vi) procedures to be implemented to minimise potential surface water impacts.
- (d) **Noise Management Plan** to outline monitoring, management procedures and measures to minimise total operational noise emissions from the Project. The Plan shall also include, but not necessarily be limited to:
- (i) identification of all relevant receivers and the applicable criteria at those receivers commensurate with the noise limits specified under this approval;
 - (ii) identification of activities that will be carried out in relation to the Project and the associated noise sources;
 - (iii) monitoring of Project noise impacts at the relevant receivers against the noise limits specified under this approval;
 - (iv) details of all management methods and procedures that will be implemented to control individual and overall noise emissions from the Site during the Project;
 - (v) details regarding the procurement process to guarantee that equipment levels meet the noise levels as provided in the documents listed in condition A2;
 - (vi) development of reactive and pro-active strategies for dealing promptly with any noise complaints;
 - (vii) noise monitoring and reporting procedures; and
 - (viii) regular internal audits of all plant and equipment.

- (e) **Spontaneous Combustion Management Protocol** to outline measures to minimise and manage hazards including the spontaneous combustion of the coal stockpiles. The Protocol shall include, but not necessarily be limited to:
- (i) coal stockpile management measures;
 - (ii) monitoring of potential causes of spontaneous combustion events; and
 - (iii) corrective action in the event of spontaneous combustion.



PORT WARATAH COAL SERVICES

6 August 2015

Ms Kate Wedgwood
NSW Planning Assessment Commission
GPO Box 3415
SYDNEY NSW 2001

Dear Ms Wedgwood

**Port Waratah Coal Services Limited (Port Waratah) Terminal 4 Project
Proposed Voluntary Planning Agreement (VPA)**

I refer to Mr Ken Gouldthorp's letter dated 29 July 2015 to you in relation to the above titled matter.

I confirm that the Board of Port Waratah has consented to the following essential terms (as outlined in Port Waratah's letter to Mr Gouldthorp dated 15 July 2015) of the proposed VPA to be made pursuant to Section 93F of the NSW Environmental Planning and Assessment Act 1979 (the Act):

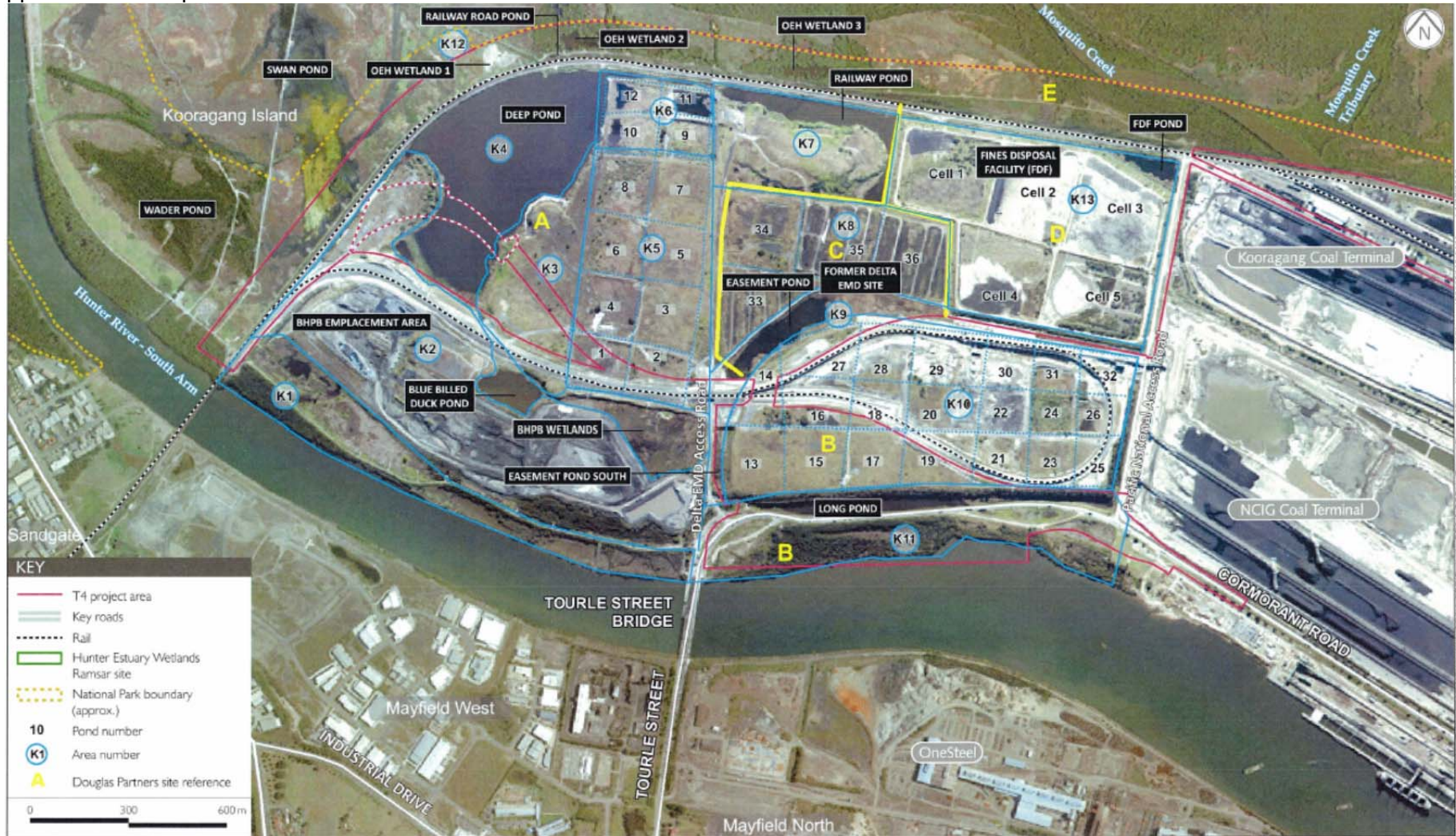
- (i) Upon taking a final decision to proceed with the construction of the Terminal 4 Project, the amount of \$528,140 representing the developer contributions in respect of potential impact on Council services and public amenities;
- (ii) Upon taking a final decision to proceed with the construction of the Terminal 4 Project, the amount of \$1.5 Million for allocation towards infrastructure projects to be selected from Council's work schedule and new facilities as listed in Schedule 1 of Appendix A and B to the Section 94A Development Contributions Plan as it is made and updated from time to time;
- (iii) \$400,000 per annum for allocation towards infrastructure projects to be selected from Council's work schedule and new facilities as listed in Schedule 1 of Appendix A and B to the Section 94A Development Contributions Plan as it is made and updated from time to time. This contribution will be paid annually, commencing 12 months after (ii) above and will continue for 25 years; and
- (iv) The above amounts will be escalated by the official consumer price index from the date of development approval to the date of payment.

I have separately confirmed the above matters to the NSW Department of Planning & Environment. A copy of this letter is attached for your information.

Yours sincerely

HENNIE DU PLOOY
CHIEF EXECUTIVE OFFICER

Appendix 2 – Site ponds



Source: Douglas Partners, 2013; IDS, 2013; SKM, 2011

Locations of waste disposal cells and surface water features

T4 Project - Response to Submissions and Preferred Project Report

FIGURE 4.1