Submission to Port Waratah Coal Services Terminal 4: Response to Submissions and Preferred Project Report

I/We are grateful for the opportunity to respond to this dangerous development proposal.

Despite reducing capacity from 120Mt to 70Mt, Port Waratah Coal Services' (PWCS) *Response to submissions and Preferred Project Report* (RS/PPR) does not adequately address the issues raised by submissions to the Environmental Assessment (EA). The T4 project will have significant and unacceptable impacts. I therefore object to the fourth Newcastle coal terminal (T4) being approved and built. These unacceptable impacts include the following:

1. **Global warming:** The burning of an additional 70Mt of coal a year will add about 174Mt of carbon dioxide to the atmosphere. Although not part of Australia's formal commitments under the UN climate change convention (UNFCCC), this equals 30% of Australia's total annual GHG emissions. The International Energy Agency predicts that to limit global warming to under 2 degrees Celsius, global coal demand must peak in 2016,[1] at least a year before PWCS indicates T4 will begin operation.

2. **The Hunter wetlands:** T4 is proposed to be built on the edge of the Hunter Estuary National Park, 18.5ha of which was removed from the Park to facilitate this project. The project will also develop lands held by OEH under Part 11 of the *National Parks and Wildlife Act* which is supposed to be managed for conservation. This area includes Swan Pond. The response to submissions does not address the conflict and possible illegality of using lands owned and managed under the *National Parks and Wildlife Act* for industrial development. We are aware that negotiations were underway to give or sell this land to the Port Corporation. No update on this process is provided. The Hunter estuary is an internationally recognised wetland protected by the Ramsar Convention[2]. The estuary is already heavily impacted by industry. The offset strategy proposed by PWCS cannot compensate for T4's proposed impacts.

3. **Endangered species:** The Hunter Estuary supports 112 species of waterbirds and nationally and internationally listed threatened species, including the Australasian bittern (*Botaurus poiciloptilus*), listed as endangered under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act), green and golden bell frog (*Litoria aurea*), listed as vulnerable under the EPBC Act and known to breed in the Ramsar site, and the estuary stingray (*Dasyatis fluviorum*), listed as vulnerable on the IUCN Red List. Important habitats that will be impacted by T4 include Deep pond, Railway pond, Bittern pond and Swan pond.

a. **Deep Pond:** The 23 hectare freshwater drought refuge supports at least 11 species of migratory recorded and above the threshold of 0.1 per cent of the Australian flyway population for three migratory shorebird species, with 600 sharp-tailed sandpiper, 450 curlew sandpiper, and 270 marsh sandpiper

recorded. T4 will destroy 80 per cent of Deep Pond.

b. **Swan Pond:** 2.3 hectares of Swan Pond will be destroyed by T4. Swan Pond also exceeds the threshold of 0.1 per cent of the Australian flyway population for three migratory shorebird species, including records of 1,482 sharp-tailed sandpiper 152 marsh sandpiper and 78 common greenshank. Swan Pond is public land, owned and managed by the National Parks Service under Part 11 of the NSW National Parks and Wildlife Act. It is part of a highly successful long-term restoration project, the Kooragang Wetland Rehabilitation Project (KWRP) and has been the site of significant hours of volunteer labour by the local bird watching club.

c. **Offsets:** T4 will destroy 28ha of habitat known to support a population of the Nationally threatened Australasian bittern. The PPR proposes a highly experimental proposal to build and create habitat for both the migratory shorebirds and Australasian bittern. Though creation of new habitat has been seen to work for Green and golden bell frogs, it is not known if this will succeed for the birds. It is crucial that no clearing or construction begins before this offset site is established, and shown to be used by the species concerned. SEWPaC (The Commonwealth environment department) state in their submission to the EA that avoidance and mitigation are the primary strategies for managing potential impacts of a proposed action and while offsets can help to achieve long term conservation outcomes, they are not intended to make proposals with unacceptable impacts acceptable.

The proposal to acquire habitat areas at Brundee (near Nowra) and Ellalong Lagoon (near Cessnock) does nothing to offset impacts on species occurring in the Hunter estuary and only serves to further degrade their status on a broader scale. The proposed Ellalong Lagoon offset area as proposed in the EA, is 40km from the project area & is recognised as providing different habitat attributes to those occurring in the project area. The proposed Brundee offset area is located approx. 250km from the project area so cannot contribute to the conservation of biodiversity values present in the Hunter estuary or offset impacts on them. The proposed Tomago offset area currently provides suitable wetland habitat attributes so it's acceptance as an offset area as a result of the T4 project will further contribute to the net loss of wetlands in the Hunter estuary, which is already recognised as significant. Any proposed species habitat restoration in offset areas, such as Green and Golden Bell Frog habitat creation in the proposed Tomago offset area, should be demonstrated to be effective before any impacts on existing habitat areas should be considered.

The reservation of suitable habitat for respective species elsewhere does nothing to protect these species or ecological communities in the Hunter region where they are significant in a local and regional ecological context and only contributes further to overall loss across the distribution range or extinction risk. The same principles apply to migratory shorebirds, Australasian Bittern, threatened aquatic bird species, endangered ecological communities, other species and the loss of habitat generally as a result of the T4 project.

d. **Green and Golden Bell Frog:** The T4 project area covers a significant proportion of the extant (existing) Green and Golden Bell Frog habitat in the Hunter estuary and it is highly likely that the majority of the population in the

project area will be adversely impacted due to removal of key habitat for this species. There is no certainty that the proposed management measures for Green and Golden Bell Frog within the T4 site or habitat creation at the proposed Tomago offset area will be effective in protecting the species in the region. Establishment of a research program is an adjunct to conservation and does little to conserve biodiversity in situ while habitat is being lost from direct impacts. Either the proposed mitigation measures should be implemented and demonstrated to be successful in preserving a viable population of this species in the Hunter estuary prior to any impacts on extant habitat areas or the precautionary principle should apply and key habitat areas be protected from any impacts.

e. **Ramsar wetland values:** Little has changed between the Environmental Assessment and the PPR in terms of the proposed degradation of Ramsar wetland values through the removal of existing estuarine habitat. Significant habitat is known to be present within the T4 project area and this cannot be adequately compensated by the proposed mitigation measures and offset strategies.

3. **Ground and surface water:** There is substantial uncertainty around the impacts of proposed ground and surface water management during construction and operation due to contamination issues or inherent differences in water quality between/within the site & surrounding habitats. The precautionary principle should apply to management of these aspects if certainty cannot be provided.

4. **Air quality:** Newcastle and the Hunter Valley communities are impacted by dust from the mining, transport and stockpiling of coal. An additional 70Mt of coal exported will mean roughly 7,000 additional trips of 80 wagon trains between the Hunter mines and the port and back again, the capacity to export coal from an additional 8 to 10 mega mines and four new 1.5km coal stockpiles will substantially add to PM10 emissions in Newcastle and the Hunter Valley.

a. *Number of PM10 exceedences*: The RT/PPR air quality modelling continues to use 2010 as a base year. The submission to the T4 EA by NSW Health suggested that the EA should have included "a justification for assuming the PM10 levels in 2010 would be a realistic baseline for modelling future particulate levels or alternatively use, as a baseline, average levels over a longer period of time". This recommendation is ignored in the RT/PPR. During 2010 only one daily PM10 exceedence occurred and only one day did PM10 levels exceed 45ug/m3. In 2012, PM10 levels exceeded 45ug/m3 nine times (one of these was over 50ug/m3). Since 2005, when PM10 monitoring began in Newcastle, there have been 20 exceedences and 17 days above 45ug/m3. This is an average of 2.5 exceedences a year and 2.125 days over 45ug/m3; more than twice the number as in 2010. If an average baseline was used rather than 2010, the additional particle pollution associated with construction and operation of T4 could result in levels exceeding the national standard an average of 4.6 days a year.

b. *Particle pollution from rail transport*: The RT/PPR does not address air quality issues from rail transport returning to the Upper Hunter Valley. It has been shown clearly by CTAG that significant particle pollution is emitted by empty

coal wagons returning to mines.

c. *Air pollution close to rail corridor*: The RT/PPR continues to focus on air quality impacts within 20m of the rail corridor. Only about 100 homes fall within this area between Muswellbrook and Newcastle. There are over 30,000 people living within 500m of the rail corridor and 23,000 students attend 16 schools. The submission to the EA by NSW Health noted that the contribution of coal dust from coal trains beyond 20m from the rail corridor needs to be carefully considered. This recommendation is ignored in the RT/PPR.

d. *Diesel exhaust emissions from ships and coal trains*. The additional 7,000 return train movements and more than 700 return ship movements necessary to deliver 70Mt of coal to and from T4 will significantly increase diesel emissions in Newcastle and the Hunter. Diesel emissions are listed as a known carcinogen by the International Agency for Research on Cancer. The submission to the EA by NSW Health noted the failure of the EA to address diesel exhaust emissions and recommended a comprehensive health assessment. The RT/PPR ignores this recommendation.

5. **Socio economic impacts:** T4 will generate some economic advantage but will also have significant impacts on existing Newcastle and Hunter businesses and communities. These impacts are not adequately offset by the proposed economic benefits of T4.

a. *Justification for the project*: There is no justification for the project. PWCS does not commit to building T4 and only suggests an indicative build date of 2015 with operation maybe in 2017. During a major downturn in global coal demand, Newcastle's approved coal export port capacity of 211Mt seems optimistic. During 2012, only 141Mt of coal was exported meaning 60Mt or 42 per cent of capacity was uninstalled.

b. *Employment:* The 120 Mt facility proposed in the EA identified no additional employment would result from its operation. The revised T4 project of 70Mt million of the RT/PPR is identified as employing 80 additional people. How is this possible? This dubious additional employment is not explained.

c. *Alternative industries*: Exxon Mobil [3]suggests global coal demand will peak in 2025 and decline thereafter. BP[4] suggests that coal's recent rapid gain in share will start to reverse soon, with a trend decline evident by 2020. Goldman Sachs suggests that coal will never recover from its current downturn, expecting average annual growth of one per cent b 2013-17, compared to seven per cent in 2007-12.[5] They suggest that Australia's total thermal coal exports in 2017 will only amount to 194Mt; 92 per cent of currently approved capacity. New industries will be required to replace coal in the near future. These industries will require export facilities that may include the T4 site.

d. Dutch disease and the economic risk of relying on coal exports: Coal is by far the Port of Newcastle's largest trade commodity, representing around 95% of the total port throughput in mass tonnes and $20 billion in 2010-11, half of which is to Japan. The US Energy Information Agency (EIA) suggests that "Although the nuclear power plant shutdowns after the Fukushima disaster

necessitate an increase in coal use in the near term, a shift toward renewable energy and natural gas for electricity generation weaken electric power sector demand for coal in the long run. Japan is currently the world's second-largest steel producer, but its steel production declines after 2020 as its population and domestic demand both decline."[6]

e. *Privatisation of Newcastle Port:* The heavy reliance of the Port on coal exports may give rise to unique diversification risks. **[7]** It is acknowledged that the value of Newcastle Port Corporation will increase substantially after approval of T4. But approving a major development so as to artificially inflate the value of an asset cannot be justified when it fetters future discretion on available limited port land and the opportunities this land may present to those alternative proposals.

[1] IEA, World Energy Outlook 2011.

[2] Hunter Estuary Wetlands (21/02/84). New South Wales, 2,969 ha

[3] Exon Mobil (2013) The Outlook for Energy: A view to 2040

[4] BP (2013) Energy Outlook 2030

[5] T. Edis (31/7/13) Coal's crippling outlook, *Climate Spectator*

[6] US Energy Information Administration (2013) International Energy Outlook

[7] Dr Martyn Taylor, Nigel Deed, 2013. Privatisation of Port Newcastle, Australia.