

Major Planning Assessments  
Department of Planning and Infrastructure  
GPO Box 39  
Sydney 2001

Your ref: 10-0215

19 November, 2013

Dear Sir/Madam,

### **Submission of Objection – Port Waratah Coal Services Terminal 4**

The Nature Conservation Council of NSW (NCC) welcomes the opportunity to comment on the proposed Port Waratah Coal Services (PWCS) Terminal 4 (T4).

NCC is the peak environment body for New South Wales, representing more than 110 member organisations across the state. We have long-standing experience in state environmental assessment and planning and are extremely concerned with the proposal to build a fourth coal loader terminal in Newcastle.

The T4 coal terminal would release toxins into the environment, exacerbate air and noise pollution and destroy critical wetlands, all of which will cause negative health and socio-economic impacts for the Newcastle community and the biodiversity of the Hunter estuary.

Furthermore, there is no demonstrated need for an additional coal terminal in Newcastle, therefore this project is unnecessary and represents significant environmental and health risks.

### **NCC objects to this development application on the following grounds:**

#### **Hunter Estuary Wetlands**

The Hunter estuary is an internationally recognised wetland listed under the Ramsar Convention (1971) and is already seriously affected by the cumulative impacts of industrial development. The proposed T4 project will exacerbate environmental problems caused by the rapid expansion of the coal industry in the Newcastle-Hunter region by removing fringes of healthy wetland.

As a contracting party to the Ramsar Convention, Australia is committed to maintain the ecological character of their wetlands and ensure they are protected. T4 represents the degradation of Ramsar wetland values through the removal of existing estuarine habitat.

Significant habitat is known to be present within the T4 project footprint and the proposed mitigation measures and offset strategies are inadequate as compensation for the losses.

Australia's unique biodiversity is in decline, and projects such as T4 accelerate this decline by destroying the habitat of threatened species and migratory birds.

## Offsets

The proposed offset schemes are token environmental gestures that will fail to prevent environmental deterioration of the Hunter wetlands. These wetlands are of national importance but are under sustained ecological pressure. For example, Big Pond, a significant site for migratory shorebirds, was filled in and destroyed by the Newcastle Coal Infrastructure Group during the construction of the Third Coal Terminal.

The T4 proposal would destroy a further 28 hectares of habitat known to support a population of the nationally threatened Australasian bittern (*Botaurus poiciloptilus*). Further, the destruction of Deep Pond and part of Swan Pond represent the loss of two of the most significant sites for migratory shorebirds in NSW. This would result in a net loss of wetlands in the Hunter estuary and habitat for migratory shorebirds, threatened aquatic bird species and endangered ecological communities.

The 242 hectares secured by PWCS at Tomago as an offset does not inadequately compensate for the destruction of wetlands and mangrove forest on Ash Island and at Kooragang. This site has allegedly already been committed as an offset site by several other corporations, including Northbank Enterprise Hub and the Newcastle Coal Infrastructure Group.

The site is also insufficient since the Environmental Assessment for the T4 project states that none of the migratory shorebirds that will be impacted by the development were seen at the proposed Tomago site. Further, the mangrove habitat on the offset site is too immature to provide suitable roosting habitat for migratory shorebirds.

The secured habitat areas at Brundee and Ellalong Lagoon do not offset impacts on species and ecological communities occurring in the Hunter estuary. These sites are 250 kilometres and 40 kilometres respectively from the T4 project area and represent different ecological communities.

The proposed habitat restoration offset scheme is also inadequate since the methods suggested are experimental. Deep Pond and Swan Pond are uniquely suited to the migratory shorebirds, Australasian bittern and green and golden bell frog, and the likelihood of successfully recreating these habitats is extremely uncertain.

PWCS claims that the offset sites "represent an environmental gain and a net improvement in the conservation of species in the Hunter region, and more broadly in the bioregion"<sup>1</sup> are false.

It is likely that losses to biodiversity from the proposed T4 project will not equal gains from the proposed offsets. It is far more likely that there will be a net loss of threatened species and

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<sup>1</sup> This is stated in section- 8.1 The PWCS T4 Project- Response to submissions and preferred project report, September 2013.

migratory bird habitat and a continued decline in migratory shorebird numbers, especially the smaller species, as most attempts at compensation for habitat loss have failed.

Furthermore, there is little evidence demonstrating that rehabilitating disturbed sites adequately compensates for losses to previously undisturbed environments. This is due to time lags for plants/ecosystems to become established and the complexities of environmental systems, which are difficult to reproduce. Offsets results in ecosystem fragmentation, simplification and disruptions to interlinked environmental flows.

### Threats to Biodiversity and Endangered species

Eastern Australia has seen extensive reductions in native vegetation, and a quarter of wetlands of national importance in the region are under ecological pressure.<sup>2</sup> T4 threatens to add to this loss, due to habitat loss, isolation and habitat fragmentation of ecological communities that will have a significant impact on threatened species of the Hunter Estuary.<sup>3</sup>

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.

T4 threatens to destroy and fragment habitat that supports these species at Deep Pond, Railway Pond, Bittern Pond and Swan Pond. These habitats contain mangrove forest and endangered ecological communities of coastal saltmarsh and freshwater wetlands on coastal floodplains that also provide habitat for several threatened flora species including the threatened plant *Zannichellia palustris*.

Table 1. Threatened species found on the T4 site.

<b>Flora</b>	<i>Zannichellia palustris</i>
<b>Amphibians</b>	Green and golden bell frog ( <i>Litoria aurea</i> )
<b>Birds</b>	Australasian bittern ( <i>Botaurus poiciloptilus</i> ) Black-necked stork ( <i>Ephippiorhynchus asiaticus</i> ) Black-tailed godwit ( <i>Limosa limosa</i> ) Blue-billed duck ( <i>Oxyura australis</i> ) Curlew sandpiper ( <i>Calidris ferruginea</i> ) Freckled duck ( <i>Stictonetta naevosa</i> ) Glossy black cockatoo ( <i>Calyptorhynchus lathami</i> ) Great knot ( <i>Calidris tenuirostris</i> ) Magpie goose ( <i>Anseranas semipalmate</i> ) Osprey ( <i>Pandion cristatus</i> )

<sup>2</sup> State of the Environment Report, 2006

<sup>3</sup> Refer to Table 1. for list of Threatened species found on the T4 site.

	Pied oystercatcher ( <i>Haematopus longirostris</i> ) Spotted harrier ( <i>Circus assimilis</i> ) White-fronted chat ( <i>Epthianura albifrons</i> ) Red-backed button-quail ( <i>Turnix maculosa</i> )
<b>Bats</b>	Eastern bent-wing bat ( <i>Miniopterus schreibersii oceanensis</i> ) Eastern free-tail bat ( <i>Mormopterus norfolkensis</i> ) Greater broad-nosed bat ( <i>Scoteanax rueppellii</i> ) Greyheaded flying fox ( <i>Pteropus poliocephalus</i> ) Largefooted myotis ( <i>Myotis macropus</i> ) Little bent-wing bat ( <i>Miniopterus australis</i> ) Yellow-bellied sheath-tail bat ( <i>Saccolaimus flaviventris</i> )

### Negative social and economic impacts

A serious weakness of the T4 proposal is that Newcastle will not benefit from the construction of another coal terminal. The proponents have not adequately considered the Newcastle community in regard to emissions to air, soil and water, and the ongoing noise, dust and pollution from the coal terminal activities.

The T4 project is not consistent with the principles of ecologically sustainable development (ESD), that decision-making processes should effectively integrate both long- and short-term economic, environmental, social, and equity considerations.

### Community Impacts and Public Health

T4 would significantly affect the surrounding air quality and increase residents' exposure to dangerous particle pollution (PM2.5 and PM10).

For this reason the NSW Government should be urgently considering how to reduce particle pollution from industry as air quality already causes health problems such as asthma and other short- and long-term respiratory and cardiovascular disease.

Coal dust from train wagons, conveyors and stockpiles regularly cause particle pollution in Newcastle to exceed the national standard for PM10, and T4 would significantly exacerbate this problem, leading to adverse health impacts, increased hospital admissions and premature deaths for Newcastle residents.

T4 would also dramatically increase train, ship and vehicular movements, causing associated amenity (noise, coal dust and diesel exhaust) and further public health impacts.

### Water impacts

T4 poses risks to the environment (land, water, air and biota) of the Hunter estuary and Hunter Wetlands National Park as a result of leachate from contaminated lands on site leaking into ground and surface waters during excavation works and construction, throughout the life of the project and beyond.

Other problems that threaten to impact ground and surface water quality within the site and surrounding catchment are oil pollution, dredging and industrial development impacts, which have the potential to cause erosion and eutrophication.

The increasing industrial development of the Port of Newcastle and oil spills will increase concentrations of polycyclic aromatic hydrocarbon (PAH), heavy metals, trace elements and other toxic materials in estuarine and mangrove sediments. The mangrove wetlands in the Hunter estuary are a sink for these pollutants, which can accumulate in sediments and cause harmful biological effects for aquatic organisms and other animals along the food chain.<sup>4</sup>

If groundwater is contaminated it can have an impact on human health. Once groundwater is contaminated it is unknown how long it would take to treat the water<sup>5</sup> or if it will be possible to effectively remove contaminants.

### **Greenhouse gas emissions**

T4 will contribute directly to ocean acidification and anthropogenic climate change by facilitating the emission of very large volumes of greenhouse gases as a result of the mining and burning of coal. Climate change impacts include sea-level rise, more severe and frequent weather events, such as droughts, bushfires, heat waves, floods and cyclones.

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 United Nations Framework Convention on Climate Change (UNFCCC), this equals 30 per cent of Australia's total annual GHG emissions. The International Energy Agency predicts that to limit global warming to less than 2 degrees Celsius, global coal demand must peak in 2016<sup>6</sup>, at least a year before PWCS indicates T4 will begin operation.

### **Justification for the project**

There is no justification for the T4 project with an overall downturn in global coal demand. Also, the current coal terminals in the Port of Newcastle are not working at capacity, as there has been a significant reduction in coal volumes from Hunter Valley coal producers.

It is extremely concerning that if T4 was approved it would rely on the ongoing expansion of open-cut mines in the Hunter Valley, which would harm ecosystems and communities in the Hunter region, and produce additional greenhouse gas emissions, and air and water pollution.

The coal industry is having a destructive impact on the environment of the Hunter Region, and any expansion of the industry to service T4 will further threaten water systems and supplies, such as contamination of aquifers, creeks and rivers; cause salinisation of soils; fragment ecosystems; and destroy important agricultural lands

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<sup>4</sup> Burns, et al. 1993

<sup>5</sup> Ghose, 2009

<sup>6</sup> Missing reference

## Conclusion

It is highly likely that T4 will cause long-term damage to the region's water resources and threatened species, and pose serious health risks to the people of Newcastle and surrounding areas, adding to the significant environmental and health burden already imposed by the rapidly expanding coal industry.

Approving the T4 project would be contrary to the principles of ESD and the concept of the "wise use" because the ecological character of the Hunter estuary, including the Ramsar site and Hunter Wetlands National Park, would be significantly degraded. The NSW Government must manage and protect these wetlands so they continue to provide valuable environmental services and linkages between environmental processes.<sup>7</sup>

After assessing the Environmental Assessment and the response to submissions and Preferred Project Report for the T4 project, the NSW Nature Conservation Council is not satisfied that the impacts of the proposal could be managed and mitigated to an acceptable degree. Due to threats to biodiversity, threatened species, water and public health, it would be irresponsible to approve the T4 project, consequently we urge the NSW Government to reject the proposal.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Katherine Smolski', with a stylized flourish at the end.

Katherine Smolski  
Campaigns Director

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<sup>7</sup> Turner et al. 2008

## References:

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