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This is a submission from the Stockton Community Action Group objecting to the proposed Port Waratah coal services Terminal 4 development in Newcastle (10\_0215).

**The T4 proposal must not be approved** due to many significant and unacceptable impacts. Please find details below regarding these impacts and their direct impact on the community of Stockton.

The Stockton Community Action Group feel that a number of investigations need to take place before any approval is given for a new coal loader. These investigations include:

1. The installation of PM2.5 and PM10 continuous monitors at Stockton and other suburbs in order to assess the current data
2. The completion of a full health risk assessment

If the project is approved, the Stockton Community Action Group recommends the following measures:

- Coverings for the coal whilst it is being transported
- Simultaneous spraying of coal piles
- Installation of wind fences around the coal piles or location of stockpiles inside buildings as occurs at overseas locations
- The installation of continuous PM2.5 and PM 10 particle monitors with [ability to analyse particles for origin](#)
- [Improvement of the road network as outlined in this submission](#)

The coal terminal concept drawings for the proposed however rejected coal loader on the old BHP site included wind fences. This technology is well known and used elsewhere in the world to reduce coal dust emissions and could readily be applied to the T4 site and existing coal stockpiles on Kooragang Island.

### **Impacts on air quality**

PWCS operates two coal-loaders at Carrington and Kooragang Island, which are due to reach the 145million tonne capacity by 2014. The \$5billion Terminal 4 project Port Waratah Coal Services (PWCS) proposes for Kooragang Island



would allow for an extra 120million tonnes of coal to be exported through the Port of Newcastle. Locally, the fourth coal terminal project would see 41 more coal trains through Newcastle and Maitland *every day*, increasing dust related health problems such as asthma and other respiratory ailments.

The Stockton Community Action Group is particularly concerned with the proposal for the additional coal loader, T4, because the modelling for this project was based on very little data from Stockton. There are no PM2.5 and PM10 continuous monitors at Stockton, only samplers that take samples every 6 days, missing many events of high dust emissions. These samplers are located at inappropriate locations where impacts from buildings and trees are evident. The predominant winds for the Newcastle area on an annual basis are from the West, North West. These winds will see the coal dust from the terminal and from the coal trains landing over Stockton. Stockton residents already suffer from living with coal dust on a daily basis. Indeed, complaints to the Stockton Community Action Group show it is clear when strong W and NW winds start, especially in winter that the amount of coal dust falling on buildings, swimming pools and other facilities is significant. Analysis from samples taken by PWCS from complainants show that this dust is typically up to 20 % coal dust which is a major concern for residents in the area regarding the effect on their health. Hence the modelling data for the new terminal is inadequate and unreliable. Modelling with this inadequate data show there will be increased exceedences with the T4 expansion on small particles, which is not acceptable to the community and is non-compliant with the air quality requirements for any development.

There is a need to install monitors and reassess data.

The current PWCS practice to reduce coal dust from the coal piles is to spray the coal piles. This tends to be on the basis of spraying one pile after another rather than all heaps simultaneously. There are also currently no wind fences in place. Wind fences currently exist in Europe, Asia and the US with the intention of reducing dust emissions on dry windy days.

### **Health Impacts**

There is evidence that pollution from coal affects all major body organ systems and contributes to the leading causes of morbidity and mortality. As reported by Damon Cronshaw in the Newcastle Herald on 30 October 2010:

‘ “A senior NSW health official says exposure to coal dust particulates can harm people's health, even if the pollution is within state guidelines.”  
The Northern Sydney Central Coast area director for public health Peter Lewis made the submission to the Department of Planning about a South Korean company's plan for the Wallarah No 2 mine in the Wyong Shire.  
"Any increased exposure to particulate pollution is associated with increased adverse health outcomes, even if the levels are below the current guidelines," Dr Lewis wrote.



Dr Lewis said increased particulate exposure could cause deaths, require hospital admission, and make children have more chest colds, night-time coughs and trips to the doctor.'

The Stockton Community Action Group is very concerned about the lack of information available about the health risks of living near coal loaders and we feel that it is very important that a full health risk assessment be conducted before any approval is given.

### **Water pollution and dredging impacts**

Directly affecting Stockton and surrounding residential areas, the proposal for the 4<sup>th</sup> coal loader carries the risk of mobilising toxic contaminants on Kooragang Island, the former BHP Steelworks site, and in the South Arm of the Hunter River. Too little is known about the risks to ensure the communities of Newcastle will be protected from toxic accidents, seepage and other incidents. There is no plan to fully remediate the site that is proposed for use for T4.

Contaminates recorded at elevated levels at the Waste Emplacement Facility on Kooragang Island (Report from Douglas Partners, 2010) were:

"polycyclic aromatic hydrocarbons, benzo(a)pyrene, total petroleum hydrocarbons, phenols, asbestos, ammonia, cyanide, manganese, sulphate, lead and other metals. Monitoring data indicates that contaminant migration has occurred beyond the waste emplacement areas; however, the extent of contaminant migration has not been defined.

None of the landfill sites within the former Kooragang Island Waste Emplacement Facility have engineered base or side lining systems, and all but one do not have a leachate collection system."

With T4 there will be more dredging up of toxic industrial contaminants, as well as:

"Exacerbation or migration of existing contamination and/ or new contamination, such as from mobilisation of soil contaminants into groundwater, additional loading and 'squeezing' of the ground, connection of groundwater aquifer systems from penetration of the clay aquitard and/or migration of potentially contaminated water that accumulates in the T4 Project area; changes to groundwater recharge and flow regimes, such as from filling and capping of the site, infiltration of saline water from dredge material used as fill and other project related alterations to the surface water regime; the risk and implications of interception, exposure and/or mobilization of contaminants and PASS, for instance from the proposed drainage and earthworks."



Prior to 'remediation' dredging (purpose to widen and deepen the river) the government initially had more stringent conditions for the encapsulation and disposal of contaminants.

quotes /excerpts from PWCS Preliminary Environmental Assessment Report 2010

<https://majorprojects.affinitylive.com/public/7928e794a65a13dec5a5bb883b42b8c1/Preliminary%20Environmental%20Assessment.pdf>

In addition, the Fourth Coal Terminal would facilitate many more large coal mines (the equivalent of at least 15 'mega-pits') in the Hunter and Liverpool Plains which threaten food and water security by destroying prime agricultural land, irreversibly damaging ground water systems and polluting waterways.

### **Traffic Impacts**

Two major traffic safety issues for traffic currently on Kooragang Island are:

a) The relatively high occurrence of rear-end traffic accidents due to the slow moving peak hour traffic currently on the island. According to the Roads and Maritime Services (RMS) this will only be fully addressed once the 4-lane duplication of the Tourle Street Bridge and Cormorant Road route is completed, at a date yet to be determined by the RMS.

And

b) The high rate of right-turn traffic delays, increasing traffic safety issues at unsignalised intersections. Right turns are currently banned at most of these intersections because of reduced available gaps in traffic and "risky turning behaviors by motorists." It needs to be pointed out that the only traffic that would be making turns at these intersections is industrial traffic, i.e. predominantly heavy vehicles entering or exiting the industrial sites.

According to the Assessment, this will only be improved by either a) constructing a four-way roundabout on Cormorant Road, which would replace the existing T intersections at Pacific National Access Road and the NCIG Wharf Access Road or b) a new wharf access road off Cormorant Road. Temporary traffic signals would be installed during this construction period at the Cormorant Road/NCIG Wharf Access Road intersection. In the meantime, with increased heavy vehicular traffic associated with construction of T4, a collision between a truck and light passenger vehicle could be catastrophic.

Accident History for MR108 (Tourle Street and Cormorant Road) between 01/07/2005 and 30/06/2010 reveal 83 recorded accidents along 5 kilometers (daily vehicular traffic flow 25,000-29,000) which is relatively high in comparison to recent NSW traffic averages.



Heavy vehicular traffic is significant on Kooragang Island, accounting for 10% to 20% of traffic during surveyed peak hours in the 2011 Survey undertaken by the RMS.

High proportions of rear-end traffic accidents on Teale Street and Cormorant Road is “characteristic of the congested peak-hour traffic conditions on this section of road.”

It is logical to say this would increase substantially during construction of T4 over the next ten plus years from Stage1 starting in 2013 up until Stage 3 (2020 to 2022) completion. We note that the most intensive construction period will be stage 1, which will proceed with existing road networks in place, resulting in increased traffic delays and road safety issues.

#### Further Delays to Motorists

There will be new access points (to the T4 construction site) in addition to existing access points along Cormorant Road, Tourle Street and Industrial Drive.

The additional truck traffic will be so problematic that prior to work on the T4, a four-way roundabout is to be installed 1.5 km east of Tourle Street Bridge to replace existing industrial access points (Pacific National Access Road and NCIG Wharf Access Road T-intersections)

This of course will provide better and quicker access to and from Cormorant Road for all the additional heavy vehicle traffic. Alternatively, temporary traffic lights may be installed, causing further delays to motorists.

In the meantime the main road network along Kooragang Island will remain single carriage as at present. Note: No timeframe has been provided for duplication of Cormorant Road.

From the above, it is logical to conclude that there will significant traffic delays for the motorist.

#### Main Intersections to be used by traffic accessing T4 project areas

- Industrial drive/Woodstock Street (LoS F)
- Industrial drive/Tourle Street
- Cormorant Road/Delta EMD Access Road (LoS F)
- Cormorant Road/Pacific National Access Road (LoS F)
- Cormorant Road/NCIG Wharf Access Road (LoS F)
- Cormorant Road/Egret Street (LoS F)
- Cormorant Road/Teal Street
- Teal Street/Raven Street (LoS F)
- Cormorant Road/Curlew Street

LoS (level of Service) F is the worst rating, “intersection operating beyond capacity”



### Current ratings at peak traffic periods

95,000 additional trucks will be entering and exiting main arterial roads, (i.e. MR108, Industrial Drive, Cormorant Road, Tourle and Teal Streets) from the minor industrial access roads which will be used to service the T4 construction. This will interrupt the flow of traffic, causing lengthy delays. Traffic congestion results in a number of problems, including economic costs due to delayed travel times, air pollution and accidents.

### Intersection of Industrial Drive and Woodstock Street

There are future plans for the installation of traffic lights at the intersection of Industrial Drive/Woodstock Street, 300m east of the Industrial Drive/Tourle Street traffic lights.

Calculated wait times at peak hours for the former are 'no more than 11.2 seconds' and at the latter 'no more than 31.4' seconds. Has anyone taken into consideration the banking up of traffic, at each set of lights, particularly during peak periods? There are also traffic lights at the Industrial Drive/Vine Street intersection, some 300-400m from the proposed Woodstock Street traffic lights. That makes a total of three sets of traffic lights along approximately 600/700m of an extremely busy arterial road.

Traffic lights at the Industrial Drive/Woodstock Street intersection would be convenient for the T4 project, providing access to the south bank wharf area, but how will it affect the motoring public? An increase in stop-start traffic, longer delays at traffic lights, longer commuting times, frustration, and the likely increase in accidents, particularly rear-end traffic accidents. An accident or vehicle breakdown would delay traffic for hours.

Recent Heavy Vehicle Traffic comprised 10% to 20% of traffic recorded on 25/10/2011

During the "actual am" peak hourly period 7.30-8.30am 91 truck arrivals (351 cars)

During the "actual pm" peak hourly period 4.00-5.00pm 52 truck departures (807 cars)

### T4 Construction Heavy Vehicle Traffic

Stage 1: between 7.00am to 5.00pm 5 days per week over 2-2.5 years.

- 60,000 truckloads of imported sandfill. 120 truck loads per day, 12 per hour mainly from Williamstown direction via Stockton Bridge.
- 25,000 truckloads of imported gravel and rock fill. 50 truck loads per day, 5 per hour probably travelling equally via either Stockton or Tourle Street bridges. (Stage 2 and 3 will generate 6,250 truckloads, 12-13 truck loads per day, 1-2 per hour)



- 10,000 truckloads of other construction materials such as steel, concrete and manufactured materials. 16 truck loads per day, 2 per hour with approximately 90% coming from Newcastle via Tourle Street Bridge. (Stage 2 and 3 will generate 3,000 truckloads, 6 truck loads per day, 1 per hour)

This makes a total of 95,000 truckloads, 186 per day, 19 per hour.

Note: Truck trips (a 'trip' is one way) on the road network will be 372 per day, 38 per hour!

### Pedestrians and Cyclists

At present the basic minimum level of accessibility is provided for pedestrians and cyclists along Kooragang Island, with no pedestrian facilities along the roadway. According to the submitted assessment by PWCS "the current standard...is poor, but will probably be improved when the future roadway is widened from two lanes to four, at a date which is yet to be determined."

In the meantime, Stage 1 of T4 construction would proceed without a dual carriageway in place, adding at least 95,000 trucks to existing traffic. This is an incredibly dangerous situation for cyclists and pedestrians along Kooragang Island.

### T4 Workforce Passenger Vehicle Traffic Calculated for daylight traffic.

Stage 1: Daylight hours between 5.00am to 7.00am and 4.00pm to 6.00pm - arriving and departing to and from main project sites on Kooragang Island.

300 persons who may choose to use shuttle bus transport.

975 persons generating approximately 780 car trips to and from main project sites.

Another 225 persons employed in dredging and land reclamation will add another 200 trips in each direction, totaling 400 trips.

Site visitors and courier services between 7.00am and 5.00pm at hourly rate of 15% of peak hour construction workforce traffic movements.

It is presumed that 1,200 workforce will be removed from KTC and NCIG construction projects whilst T4 is proceeding, (Stage 1) however there will still be at least an additional 300 workers.

### Types of Heavy Vehicles

No information in the assessments that deal specifically with traffic has been provided about the types of heavy vehicles that will be (or are likely) to be used in the construction of T4. What are the numbers of rigid and articulated trucks? How many (a) B doubles and (b) B triples? What is the estimated haulage weight for the different types of heavy vehicles?



Will any hazardous material be transported by road?

We request that this information be provided to the general public.

### **Employment impacts in Newcastle and Lower Hunter**

It is questionable if the job numbers will rise markedly as it is very clear the new loader will have very few extra jobs. Even the construction jobs may be limited due to the use of imported items, pre assembly and prefabricated items.

After construction, the coal terminal will provide *no additional employment*. Rather, it is likely to result in the loss of other economic activities in the port, such as tourism, fishing and other shipping

### **Impacts on habitat, endangered and threatened species, and migratory birds**

This project would damage internationally important wetlands that provide critical habitat for protected migratory bird species and nationally threatened species including the Green and Golden Bell Frog and the Australasian Bittern.

An area within the site is currently owned by the National Parks service, and provides irreplaceable habitat for migratory shore birds. The proposal will mean loss of habitat and disruption to an ecologically significant proportion of a population of four migratory shorebird species listed under international conservation conventions.

At least 11 species of migratory birds recognised by international treaties rely on the habitat at "Deep Pond" and its proximity to the Hunter estuary Ramsar site. Most of Deep Pond, the only freshwater refuge in the Hunter estuary, would be lost to this project.

The Environmental Assessment fails to meet the requirements set out by both the State and Federal agencies, and the proposal represents an unacceptable risk to the Australasian Bittern.

As submission makers are required to disclose political donations totalling \$1000 or more in the past 2 years, I can state that **I have not made a disclosable donation.**

Yours Sincerely,



Kate Johnson  
Chairperson  
Stockton Community Action Group