Rick Banyard
14 Bell St
Maryville 2293
cdcopy@hunterlink.net.au
0419993867

Rebecca Newman
Department of Planning
GPO Box 39
Sydney

Submission objecting to Port Waratah Coal Services Terminal 4 development in Newcastle. Project Number 10-021

Index to sections of this objection

Introduction

I consider it would be totally wrong and improper to approve the T4 project as outlined in the extremely verbose project proposal for the following key reasons:-

Fails to prove that there is need for the project.

Fails to demonstrate that the additional coal production from the mines can not be handled by the existing port facilities or by other arrangements.

Fails to prove that there is an economic benefit to Australia, to New South Wales, to the Hunter Region and to Newcastle LGA.

Fails to address the cumulative impacts of the T4 project on neighbours, the Newcastle LGA and on the Hunter Region and on the state of NSW.

Fails to demonstrate that the T4 use of the proposed site and the Hunter River is the best possible option for the site.

Fails to recognize that their occupation of the stockpile area and port access will effectively close out any further major development for any other purpose.

Fails to consider recreational and tourism activities or their

potential of the locality.

Fails to identify and address much of the environmental consequences of the project.

Fails to provide structures, methods and technologies that adequately address the noise, dust and vibration issues of the operation of the T4 project itself and the projects that T4 is directly and indirectly connected to.

Fails to explain how PWCS will restore the site to its former state once the activity ceases.

Fails to provide management strategies and risk assessments for much of the site operation and would seem to totally ignore off site issues that are directly linked to the project.

Falls well short of addressing the health, environment and pollution issues

Ignores the remediation of the site at the end of the projects life.

Due to the sheer volume and complexity this submission will concentrate on selected areas. The writer is aware that there are a host of other issues that makes the T4 project a highly risky and totally unsound proposal.

Before detailing my objections I wish to make two very key points about the T4 public EA exhibition process.

Firstly

The time frame allowed for public comment was grossly inadequate given the volume of the material and the fact that the material was not made available to individuals in hard copy or by CD. The exhibition period should be reopened for a further 60 day period.

Secondly

The failure of Planning to workshop the EA with the community despite a written and verbal request has severely restricted the community from communicating their issues with the approval authority.

This is a denial of natural justices and not in accordance with the stated goals 29, 31 and particularly 32 in the NSW State 2021 Plan.

The failure to workshop the proposal with the community also places unrealistic pressures on Planning NSW staff.

Please also note my submission is well below the standard and detail I would wish due the unreasonable shortness of the exhibition period.

I reserve the right to lodge a supplementary submission.

Noise and Vibration

The operation of a coal terminal and a coal mine involves the use of heavy machinery. This machinery has many moving parts and motive sources all of which generate significant noise and considerable vibration.

As machinery ages, becomes worn or is failing the noise and vibration increase very considerably. A ride on a number of Government buses will easily prove that nice new equipment can readily develop bangs, clangs, shakes and rattles as it ages.

This noise and vibration in a coal terminal is readily transmitted across level surfaces, along water courses and via course soil types and reclaimed land. In the case of T4 this covers most adjoining land and residences up to about 10 km from the site.

Noise and vibration impacts are also common issues along coal rail corridors. The 82 estimated train journeys each day with 85 wagons and 3 locomotives just to supply T4 will have a major impact from the port side to the rail lines of the Hunter Valley, Central Coast, Lower North Coast and other geographical areas. The cumulative impact makes the T4 issues even worse.

Noise and vibration from mine sites also have the issues of blasting added. It takes about 200,000 tonnes of blast material plus 40,000 tonnes of fuel per year to supply T4 with coal. That blast material has to be transported from the Port of Newcastle to the mine sites mostly by road adding a further hazard. These truck create significant noise and vibration all along our road corridors.

Shipping to and from the T4 wharfs will also impact heavily on the community with noise and vibration as shipping movements are 24 hour operations, 7 days per week and 365 days per year.

The T4 shipping noise will be even worse than the existing movements because of far greater frequency and the fact that wharfs proposed for T4 are at the furthest distance from the Harbour entry.

The water surface movement caused by shipping and tug movement within the harbour is a very real problem and has not been recognised in the EA,

The T4 EA provides no draft rules or regulations to limit and manage the noise and vibration of shipping.

The fact that authorities and regulators have limited control over visiting vessels make it very important that ships are regulated by the coal terminals. The EA provides no draft regulations to manage ships.

Dust

To compound the severe problems of noise and vibration is the very complex issue of dust.

"Research in the US has shown coal pollutants affect all body organ systems and contribute to four of the five leading causes of mortality in the US: heart disease, cancer, stroke and chronic respiratory disease.

Each step of the coal life cycle -- mining, transportation, washing, combustion and disposing of post-combustion wastes -- affects human health. In Australia, research is lacking but there is no reason to believe similar effects are not occurring in coal communities here. To deny it would be akin to holding smoking causes lung cancer in the US but doesn't in Australia.

The health burden of coal in Australia is estimated conservatively at $2.6 billion a year."

(Quote from David Shearman is emeritus professor of medicine, a practising physician and honorary secretary of Doctors for the Environment Australia).

To supply T4 with 120m tonnes of coal about 600m tonnes of the earth's surface (overburden) will have to be disturbed . This process combined with the bulking of the material will require the material to be moved and commonly stacked above the natural surface. The wind is then free to transport the dust from the spoil long distances in the atmosphere causing major health issues over a very wide area. Remediation of mine sites is a very slow process often with very dubious results.

Due to the West and North West airstreams much of this dust is blown towards the Newcastle coast and large population centres.

Clearly the T4 dust is far more than the dust on the T4 footprint. The EA shows no calculations of the total dust and its origin due to the T4 project.

The EA does not show how the dust will be contained within the site boundaries.

The coal on the speeding coal trains is subject to loss from the 40 loaded coal trains

and from the 40 empty return trains caused by T4. Coal industry figures show that the coal loss from wagons can be as high as 3 tonnes per loaded wagon.

Locally, the fourth coal terminal project would see 41 more loaded coal plus 41 empty trains through Newcastle and Maitland *every day,* increasing dust related health problems such as asthma and other respiratory ailments.

It is my understanding that there are no reliable published studies that show the actual coal losses from trains that use the Newcastle Port. It is also my understanding that there are no train weighbridges to weigh the empty wagons and weigh the full wagons at the point of unloading, Therefore there is no mechanism to accurately calculate the losses from poorly sealing bottom doors and from dust coming from the wagon.

It should also be noted that much of the dust along the train line is stirred up multiple times. Coal or dust that falls from a train may be damp or have largish particle size. As it falls to the track it becomes drier and or breaks up and then becomes airborne when the next train passes or in the next wind event. This “recirculating” dust and grime thus impacts on the community many times over.

The ARTC would appear not to have an EPA licence to pollute as a result of coal transportation as there is nothing on the POEO register. Licence EPL 3142 does not regulate the issue.

The ARTC have stated and I quote:-

> “In relation to your queries regarding the loads on coal wagons – ARTC is not subject to any environmental regulations relating to the loading or securing of coal onto wagons. This generally takes place outside of our network and is a matter for the operator, so it is suggested that you contact the relevant train operators who may be subject to requirements under relevant legislation”.

Likewise the Coal Train operators like Pacific National, Xtrata and QR etc also appear to have no EPA licence according to the POEO register.

If a figure of only 1% for losses was used that equates to about 10 ship loads of coal per year that leaves the rail head but does not get unloaded at the Port terminals.

The EA provides no information to suggest that T4 would be any better than the existing movements.

The impacts of the locomotives must also be included.

Certainly there is a large amount of potential human health damaging material and certainly environmental pollution as a direct result of T4.

Clearly a sound reason to reject the project or as a condition of consent to require that coal trains be zero emissions, that loads be 100% contained and

that trains must be washed immediately after discharging their load. The EA does not include a train wash or load containment information.

It is very common for EPA EPL's to have conditions that make it the premises operators responsibility to control the dust and other environmental issues of material coming from or leaving the premises. Here is an example:-

> *"O6.2 The licensee must implement management and control measures, before any vehicle, trailer or motorised plant leaves the premises, sufficient to ensure that mud, splatter, dust and other material does not fall from or spill from any such vehicle, trailer or motorised plant after it has left the premises or be cast off the wheels, underside or body of the vehicle, trailer or motorised plant."*

On the T4 site coal is unloaded and stacked in the stock yard before being picked up and conveyed to the ship loader. Due to blending and cargo assembly the coal may be repositioned in the stockyard a number of times. Dust is generated by the stackers and reclaimers and from wind acting on the stock piles. Water is used to dampen the dust however the stockpile dust management is constrained by the availability of sufficient water, the ability of water sprays to wet the stacks especially in hot dry windy conditions, the coal specifications that limit the coal wetness.

The documented stockpile capacities must be converted into real coal movement volumes. PWCS has a stock turn in its existing terminals is currently about 100 times the monthly stocks. Every time the stock is turned the dust flies.

The EA does not discuss alternate stockpile designs and explain why the method chosen is the best available or in fact if it is Worlds best practice.

Newcastle residents constantly complain of coal dust. The reporting is simply the tip of the dust "iceberg".

Again to be consistent with other industries in the area the conditions of consent must require that all dust, odours, noise and vibration remains within the premises.

This is no different to requiring that all water runoff is to be contained within the premises. Koppers are even required under their licence to retain odours to within their fence lines.

Again a typical EPA EPL licence condition is the following example:-

> *"O1.1 Licensed activities must be carried out in a competent manner.*
> *This includes:*
> *(a) the processing, handling, movement and storage of materials and substances used to carry out the activity;*
> b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity."

If the T4 project wishes to claim as a benefit the offsite employment generated by the activity why do they not show the huge number of people working in the health industry and funeral industry who are daily dealing with the consequences of coal mining, transport and handling AND mining overburden dust?

Pollution

Projects to be built in the future must have strong aims of operating in a zero pollution framework.

Currently the EPA issues licences to pollute however this is rapidly changing due to community pressure.

A common requirement in EPL.s is

> **"O1 Activities must be carried out in a competent manner**
> O1.1 Licensed activities must be carried out in a competent manner.
> This includes:
> a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
> b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.
> **O2 Maintenance of plant and equipment**
> O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
> a) must be maintained in a proper and efficient condition; and
> b) must be operated in a proper and efficient manner."

Very clearly this means that the design, construction and operation of a new coal terminal such as T4 must adopt the highest standards that prevail in all respects.

Pollution is no longer acceptable as it was in the past. PWCS has introduced very high personal safety standards based on the principles of zero injuries. Signage, reports and advertisements etc all relate the company's position related to zero.

The same should apply to the PWCS pollution standards. The goal, practices and reporting should all be related to zero.

Pollution from coal affects all major body organ systems and contributes to the leading causes of morbidity and mortality.

Given that the T4 project as currently proposed currently

- Facilitates the coal export capacity to feed at least 15 more large power stations around the world emitting 288 million tonnes of carbon pollution each year and fuelling climate change.
- Seeks approval to change, modify and 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.

- Wishes to use an area within a currently owned National Parks service site that provides irreplaceable habitat for migratory shore birds as well as a host of wildlife etc
- Causes loss of habitat and disruption to an ecologically significant proportion of a population of four migratory shorebird species listed under international conservation conventions.
- Impacts heavily on 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.
- Causes the loss of Deep Pond, the only freshwater refuge in the Hunter estuary. Very important.
- The Environmental Assessment Fails indicate in the EA how the project meets the requirements set out by both the State and Federal agencies.
- The EPL from the EPA is not established at the time of consent and can not be reassessed by the EPA until the review date.
- Facilitates 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.
- Massive impacts on the transport corridor leading to the Port from the north, south and west.
- Has a high visual impact on the skyline.
- Sets pollution levels to current standards of acceptable pollution and does not set zero targets
- Acknowledges the risk of mobilising toxic contaminants on Kooragang Island, the former BHP Steelworks site, and in the South Arm of the Hunter River.
- Offers no guarantee to cover the risks associated with the project to ensure the communities of Newcastle will be protected from toxic accidents, seepage, pollution and accidents.
- The plan to fully remediate the site is not part of the EA

It can be seen that the EA does not offer a zero pollution solution strategy for noise, vibration, dust or other pollutants.

I would argue that the **project should not be granted approval without zero levels being documented targets** as there are practices and procedures that can address the dust, noise, vibration and other pollution issues including:-

No open cut mining
Covering of coal wagons
Washing empty coal wagons

Using coal wagons with solid bottoms
Enclosing all conveyors
Insulation shrouds over motors and gear drives
No port side stockpiles
Stockpiles in sheds
Dust and noise barriers
Use of chemicals to bind surfaces (veneering)
Transportation of coal as a liquid or slurry

Loading ships from barges
Exporting coal from another port.
Limiting the grades and blends to be exported via T4

This list is not exhaustive and an indicator of sample options

It is interesting that the rejected Hunter Ports Coal Loader proposal intended to implement some of the strategies ignored by the EA.

I could find no evidence in the EA that the operation of a zero emissions coal terminal, transport method or coal mine practices had been considered or that Worlds best practices had been selected.

Instead the emphasis seemed to be on repeating existing technology and or meeting the maximum targets set by legislation.

This is a major contrast to the human safety objectives of PWCS.

The terminal certainly does have the ability to insist on very much higher standards in other parts of the coal chain by simply setting re receival standards.

The EA would seem to have not set any receival standards for the T4 operation.

The EA seems to assume that the atmosphere and environment are totally clear and that they do not have to take into account the base and background levels that currently exist in the location, Newcastle LGA and the Hunter. The raised background levels that will exist when other approved projects are operating to their consent conditions would seem to have not been considered

The very low standard of monitoring and sampling has in the community's opinion severely masked the true position. The introduction of new pollution monitoring equipment and new observation procedures will almost certainly result in much higher pollution indexes particularly at peak event times. The EA does not seem to consider this.

Qinhuangdao is China's biggest coal trans shipment port and an important hub to ship coal from northern China to the country's southern part, the port realized an annual throughput of 200 million tons last year, of which 175 million tons was coal, half the domestic coal shipping volume. The large amount of coal transportation has brought new topics to the port's environmental protection issue.

The Qinhuangdao Port plans to invest 1 billion yuan (about 127.5 million Au dollars) for environmental protection in the next eight years.

Qinhuangdao is aiming to build the first "Green Port" in North China in 2015, when its handling capacity is expected to go up to 400 million tons, the port has envisaged several strategies, including more investment in such projects as a dust prevention

web, coal yard watering and dustproof spray; in addition to sewage recycle system and coal energy centralized heating facilities.

Over the past years, the port has established environment-friendly projects and quality control systems, as well as reinforced sewage , coal dust and smoke treatment. As a result, the port was able to meet the national standards on coal dust, smoke and noise control and waste water discharge.

There is no evidence in the PWCS EA that Newcastle is to be established as a “Green Port” of similar. The EA is about managing the consequences and not preventing the environmental issue by a pro active approach.

The T4 proposal also carries the risk of mobilising toxic contaminants on the Toxic Dumping Grounds of 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 human and animal communities of Newcastle will be protected from toxic accidents, seepage and incidents.

There is no plan to fully remediate the sites before commencing the project. It should be noted that the HDC has had to undertake major site remediation on their ex BHP site at a cost of $100m (funded by BHP).

For a project that is promoted and assumes the status as a "significant" development it would be reasonable to expect the dust, noise, vibration and other pollution factors to be a significant improvement over the current practices, well below existing legislative levels and to be setting new world benchmarks for the terminal, for transport and for mine operations.

T4 is a bit like the stick in an ice cream.

The ice cream must match the stick.

If the ice cream is tainted and sour then the stick is useless.

If the stick is unsound, is polluted and fails to meet core health standards then it should be discarded.

Clearly T4 is unsound, is polluted and fails to meet core health standards and it should be discarded.

Health

It is very obvious to a lay person that the health implication of coal mining, coal transport and coal use to humans, animals and plants is a very serious issue.

The health impacts are real and now impact on most families in the Hunter.

When a person travels to other non coal communities it is very noticeable that the long term slow creeping coal symptoms are not present.

I wish to include the following as part of my submission as it expresses very clearly the real issue.

The heat is on for change: coal

- by: *OPINION: David Shearman*
- From:*The Australian*
- July 10, 201012:00AM

JAMES Hansen, the respected NASA scientist, said: "Coal-fired power stations are death factories. Close them." The medical profession has failed to address this serious health message. An urgent transition from coal to renewable energy will provide important health and economic benefits.

Research in the US has shown coal pollutants affect all body organ systems and contribute to four of the five leading causes of mortality in the US: heart disease, cancer, stroke and chronic respiratory disease.

Each step of the coal life cycle -- mining, transportation, washing, combustion and disposing of post-combustion wastes -- affects human health. In Australia, research is lacking but there is no reason to believe similar effects are not occurring in coal communities here. To deny it would be akin to holding smoking causes lung cancer in the US but doesn't in Australia.

The health burden of coal in Australia is estimated conservatively at $2.6 billion a year. There are also economic losses due to land pollution and degradation and the open mining of good agricultural land in the face of the projected world food crisis.

The main health impact of coal is caused through climate change. The World Health Organisation ranks climate change as one of the greatest threats to public health.

Morbidity and mortality are increasing in the developing world as the effects of climate change take hold of the environment. As the world's fourth largest producer of hard coal and the world's biggest exporter, from which we garner $20bn each year, our contribution to this pollution is far greater than our culpability as the world's greatest domestic per capita producer of greenhouse emissions.

Let us approach this as a medical problem. The climate change moral challenge referred to by former prime minister Kevin Rudd is even more compelling for the medical implications. For a wealthy country to fail to take necessary measures and to wait for others to do so can be seen as amoral. Communities in many mining regions

are worried about pollution. They write to us expressing concern about their children's asthma.

There are a number of pollutants released from fossil fuel combustion. These include nitrous oxide and sulphur dioxide, and fine particles measuring 2.5 micrometres or less, which penetrate more deeply into lung tissue than larger particles and are considered particularly hazardous to health.

In the US, exposure to these particles has been shown to reduce life expectancy. Their monitoring in Australia, especially in the areas where pollution is generated, is patchy or non-existent.

Environmental injustice can be defined as the disproportionate exposure of socially vulnerable groups to pollution and its associated effects on health and the environment, as well as the unequal environmental protection provided through laws, regulations and their enforcement. However, incomes in some coal and electricity generation townships are higher than the national average and the injustice relates not to poverty but to health inequality caused by government inaction.

For state governments to disregard pleas for action by parents whose children are suffering from pollution is a denial of their fundamental obligations to public welfare. Many in the medical profession have expressed support for the federal government's intent to improve and reorganise medical services.

The government has extolled preventive health and taken action on smoking. Pollution is an area of abject failure that government can attack. It is one of injustice and neglect, with state governments and corporations reaping the economic benefits of coal production and export.

Where states have failed to deliver on improved standards and delivery, federal intervention is needed. The Upper Hunter region in NSW has been identified as an area where residents, civil society and local government groups struggle with corporations and state government over the burden of ill-health caused by air pollution. There is ample evidence of inaction by state authorities. There is regulatory inertia and denial of public requested air monitoring, which has extended to mines where air pollution is of concern to local communities.

At one such site, an air quality panel is finally being established after many years.

Mines cannot be closed precipitously, for unemployment has personal and family health impacts. However, Doctors for the Environment Australia, in its energy policy (available at www.dea.org.au; click on Policy on main menu) opposes any new mines, particularly those ravaging good food-producing land.

For existing mines we recognise the inevitable in terms of our future national and international commitments, and urge planning for the rapid introduction of renewable energy industries into coal mining regions.

Renewable energy industries create more jobs than coalmining; they are generally safer and much healthier for workers and communities. They will offer sustainable

economic development in an area where Australia already trails other developed nations. The federal government's proposed resource super-profits tax -- now recast and rebadged as the minerals resource rent tax -- will aid this transition.

We ask why, in a wealthy, developed country like Australia, which reaps billions of dollars from the export of coal, are we neglecting the health and wellbeing of entire mining communities? Where are the health impact studies?

This is environmental injustice, with inhabitants being disproportionately exposed to pollution and its associated effects on health and their environment.

David Shearman is emeritus professor of medicine, a practising physician and honorary secretary of Doctors for the Environment Australia.

www.dea.org.au

Economics

The big picture.

The economic benefits for T4 do not look good and do not indicate sustainability.

Prices for most grades of metallurgical or coking coal (used for steelmaking) and thermal coal (used for power generation) have been falling significantly for more than a year, since the early 2011 spike driven by Queensland's floods, Japan's earthquake and the Fukushima nuclear disaster.

Countries such as Indonesia, Mozambique, Mongolia and China have ramped up production. The glut of US shale gas and the slower economic activity in the USA has pushed prices steadily lower. All this against rising Australian supplies, as our mines swung back into operation and terminal space increases.

This change in circumstances combined with raised production cost (now about $75 per tonne) and revenue heading to below $100 per tonne would seem to be a major indicator that the coal boom cycle has turned.

With export volumes falling, prices falling and coal demand falling behind supply it would seem that trade has peaked with investors winding back operations and in particular delaying new projects. BHP has closed Norwich Park mine and may also close Gregory Crinum mine, New Hope Mine has had its sale terminated

In Queensland Rio Tinto has pulled out of a $9 billion development of six new coal terminals at the port of Abbot Point, near Bowen.

So far this year, Japanese customers have bought 55 per cent of the coal shipped from Newcastle; China 15 per; cent and South Korea 10 per cent.

Given that Japanese coal companies recently settled their 2012 benchmark prices at $110 a tonne, (a fall of 11per cent on the 2011 price) the prospects do not seem to reflect the community perception of booming coal.

As the profitability drops automation will increase and jobs will be lost.

The timeline set in the EA to ship first coal in 2015 would seem to be unachievable considering the competition for port development resources, the ability to manufacture, transport and assemble terminal plant, the dredging, the rail capacity and all the other physical changes necessary. On top of this is “the paperwork progress” necessary for approval impacts.

Clearly the large number of issues, omissions and conflicting statements within the EA and the lack of preparedness for Planning NSW to workshop the proposal all act as brakes and will delay the first ship in my assessment at least 2 years.

The opposition to coal as an energy source is rising very rapidly World wide.

In Australia we have introduce a carbon tax with concessions to miners that could be withdrawn at any time.

South Korea has just passed its emissions trading scheme into law two years after its launch of its “green growth” strategy. They are a major consumer of Hunter coal, That strategy is an ambitious plan to decrease the proportion of their energy derived from fossil fuels.

Given the very bleak future for T4 Planning NSW needs to be particularly careful that granting approval for the T4 project as proposed does not tie up the site thereby preventing other worthwhile projects from proceeding.

A condition of the T4 approval must be enforceable construction dates and operational throughput targets. If PWCS is to be bound by maximum requirements. it is certainly reasonable that PWCS must comply with the minimum requirements.

The operation of T4 places considerable requirements on other parts of the coal chain from suppliers, minor and major subcontractors, the railways and the government. The viability and future of those groups should not be at the whim of PWCS.

Economic Benefit

For a “state significant” project of this nature to be given approval and preferential treatment it is mandatory that there is an economic benefit to Australia, New South Wales, the Hunter and to the Newcastle LGA.

That benefit must be a clear net positive and very significant benefit.

That benefit must not be solely to the PWCS owners must not be at the unreasonable disbenefit to other parties.

Whilst the EIS does show some of the benefits these are very shallow.

May I illustrate the shortcomings of promoted benefits via four examples:-

The construction phase of the project sounds very positive however does not explain that many of the claimed employment opportunities are not in Australia as much of the equipment and infrastructure is imported and the profits retained in that country.

The EA does not have a table showing the location (and value) that will benefit from the construction phase. Clearly the community that will be heavily impacted will receive only very minor benefit.

#The company structure of PWCS would indicate that the organization pays no tax as it trades as a not for profit organisation for it's owners and clients. It would also seem that the PWCS is also exempt from many other rates, taxes, levies and government charges. (It also benefits from subsidies and rebates etc). The EA does not contain a table of the government charges paid. Clearly the community that will be heavily impacted will receive only very minor benefit if any.

The clean up and capping of the “rubbish tip” sounds like a good idea however would not seem to adequately address the impact of the “squeezing” out of the material from under the pads or the impact on the aquifers.

The construction of new wharfs along the South Arm of the Hunter River sound to be of benefit as it facilitates shipping. A conveyor over the river sounds logical. The EA does not seem to understand the importance of the South Arm, how it was formed and why it has been modified over time. The simple placement of stones across the upper reaches has impacted on the formation of Hunter River islands.

The EA does not address the impact of the loss of current river form on the total river and river related geography, ecology and environment.

It is well researched that the primary depth and maintenance dredging has lesser biodiversity and biomass. The construction of a mono depth has major and serious impacts not addressed in the EA.

The EA shows no proposed compensation to the community and river users for the indisputable harm done by T4. River users will argue that the impacts will be significant to at least Raymond Terrace.

The changes to the River from T4 will also impact well out into the ocean. Again not addressed in the EA.

Employment

Employment should be a key product of a project given a state significant classification.

In the case of T4 according to the EA this is not the case.

In fact in the coal industry employment is commonly overstated.

May I provide two examples:-

- # Bunnings has more employees than the Coal industry
- # The Tax office in Newcastle has more employees than PWCS

Briefings to the community indicated that the employment gains of the terminal 4 project would be about 30 full time staff once in operation.

This projection in the EA have been revised downwards and now suggest that there will be no new employment with the existing PWCS staff covering the workload.

It is well known that PWCS has been striving to reduce employee numbers via efficiencies, changed practices and automation. Contract labour has also been reduced for similar reasons. The need for contractors has also diminished due to the longer lifecycles of equipment in use.

With lower PWCS staff, more efficient equipment, longer lifecycles and a new plant the need for labour is extremely low in the first 10 years of operation.

It is extremely difficult to determine the employment outcomes from the T4 EA as there seems to be confusion within the document and with other information circulated in the community via PWCS.

The following table demonstrates the position. *No time to prepare this*

The EA indicates that much of the plant and equipment is likely to be drawn from overseas in a semi assembled condition. Does this mean that many of the claimed construction jobs and multiplier jobs will not be in Newcastle, not the Hunter, not New South Wales, not Australia but in far distant countries?

Of those construction jobs claimed there is no indication if any of those jobs will be new employment for Newcastle. Given that the construction is a short term activity done buy contractors it is likely that most labour engaged will simply be moving from an exhausted project therefore not increasing the Newcastle LGA's workforce at all.

Whilst there is some benefit of continuing employment the benefits are very minor compared with new employment positions.

The EA informs readers that the existing PWCS staff will operate the new T4 facility. This again translates into no new net employment. and economic benefit.

Community Benefits

A major purpose of new projects is the benefits to the community.

This benefit may be direct from
- Employment opportunities
- Purchase of raw materials and operational supplies
- Purchase of capital equipment

Or indirect via
- Flow on employment
- Flow on purchases

In the case of T4 according to the EA there are no new jobs, much of the capital equipment is imported and there will only be some jobs in the construction phase. This does not translate into major long term community benefits as there will be little new housing of permanent community infrastructure associated with expanded communities.

Whilst some of the community activities of PWCS are to be commended the offsets to the community for T4 would seem to fall well short of the offering made by the rejected Hunter Ports Proposal.

No solutions are provided to work at solving key community issues such as the freighting of coal through the suburbs of Newcastle just meter from homes.

No realistic solutions are offered to address the Tourle St bridge issue.

Doing things like extending Cormorant Road to the west and building a new crossing to allow Cormorant Road to directly connect with the Inner City Bypass thereby eliminating four extremely problematic major traffic intersections and moving busy industrial traffic away from homes have been ignored.

The Port Side rail line along the southern side of the South Arm is again a strongly sought after solution to a serious community problem. The T4 proposal rather than assisting in achieving the outcome places a number of serious constraints in its path. The Mayfield T4 wharfs and the assess corridors to name two.

The EA and other T4 publications has not recognised the call for “no more coal” that was a major resolution at the major community meeting in Mayfield in October 2011.

The purchase of goods and services from the local community and from within the Newcastle LGA are relatively small. A consent condition should require T4 to undertake considerable local purchase.

Clearly with limited employment, the import of plant and equipment, automation and low input purchase levels and the fact that this organisation is simply a service provider (coal exporter) the benefits to the Newcastle LGA community are not high.

The use of the location for other purposes could provide considerable physical and financial benefits to the community.

The expansion of the area as a National Park, Eco Tourist resort, Wetland Centre, Marina Caravan Park, and a host of other commercial activities compatible with the location could generate considerable employment, local spending and business stimulus.

A major recreational facility like The Mingara Recreation Club on the Central Coast could be constructed drawing on the areas natural assets and potential beauty.

Mingara has an annual turn over of about $50m, a profit of about $5m and employs in the order of 1000 staff and has a massive visitor draw.

Cost to others

The construction of T4 will incur others to expend huge funds to allow the terminal to function.

For example:-

The ARTC anticipates that the remaining infrastructure development on the Liverpool Ranges line, required to service industry growth, will cost $250m. Accurate predictions of tonnage will be achieved based on take or pay contracts coal companies establish at the Port of Newcastle, which will add a fourth terminal in 2015.

How will these expenditures be recovered when the project fails or is closed down.

It need to be also remembers that much of this funding is Government money and can only be made available if other priorities are dropped. Do we drop hospital funding so T4 can be operated?

Cumulative Impacts

To ignore the cumulative impacts of any new project is folly.

Over the last 50 years lots of projects have been undertaken and their approval has added small incremental changes to our health, environment, lifestyle and economy.

Some of these changes have been most welcome and have been a net benefit to our lifestyle and economy. The home TV is a great example.

The planning process is now being far more cautious except it seems in considering coal projects.

It would seem to be a major anomaly that we are holding back from giving the green light to major housing and community development projects despite housing being one of communities most pressing needs.

Caves Beach, Branxton and Bimet Lodge are three examples.

Collectively even those projects are huge they only represent a housing expansion of less than 1% and therefore add little to the cumulative impact of housing.

This statement from Pacific National about train issues highlights the cumulative impact of just one aspect.

> "If you look at the Gunnedah Basin specifically, PN are going from seven, to 20 and then to 30 trains. During a period of shutdown, that is 30 to 40 km of train. Where do they go? There is insufficient space at low points in the majority of times, or the area surrounding track is either government owned or ARTC owned. There needs to be a solution for where trains go, to get them off the network in low times, shutdowns in the network etcetera."

With QN going from 8 trains to 38 trains and the increasing passenger train demands it is very clear that the cumulative impacts are very real and should be a major section of the EA.

It is very difficult to fathom why the Nathan Tinkler Hunter Ports proposal for a major coal terminal could be rejected on the grounds of (ran out of time as ti seems to have been removed from the Premier and Cabinet web site.)

Many in the community if given the choice would have certainly preferred the Tinkler proposal over the PWCS T4 project.

The Hunter Ports proposal was not to be built on a highly contaminated unremediated rubbish tip and National4 Park, It was going to harm the natural environment far less, indicated far superior coal handling infrastructure and offered the community many real incentives. A total contrast to the T4 proposal.

The T4 proposal needs very considerable work before it can be reasonably assessed for true cumulative community impacts.

As a minimum the base data needs to be determined for health, the environment, lifestyle, social impact, transport and the economy.

Thorougher, far reaching and complete impacts of the T4 proposal need calculating. I would suggest that the EA barely scratches the surface of the real impacts and true costs.

The T4 project data then needs to be added to the base data and compared to the standards, legislative limits and the community expectations.

My hunch is that the project would fail miserably on almost every count.

If the Tinkler Hunter Ports proposal had been permitted to progress to the EA stage then the potential benefits / harm of each project could have been compared thus ensuring that the community would be provided with the best option possible in the event of one progressing to operational activity.

In 1799 when the first export of coal from Newcastle was made there was little planning and the impact of that shipment very minor on the total community.

110 years later the planning is more detailed however the negative impacts massive.

In 1799 when the first export of coal from Newcastle was made there was a massive economic benefit as 100 % of the revenue stayed in the Newcastle area.

110 years later the economic benefit to Newcastle LGA is minor.

The T4 project assessment should be suspended until the comprehensive Newcastle Ports Master Plan is made public so that the Community can asses the Cumulative Impacts of T4 with all the other existing Business around the Port; and the proposed new business that the Government - across all its departments, has knowledge of. This needs to be produced before T4 submissions close.

Without a full and detailed cumulative impact of the proposal I find it very difficult to comprehend how such a massive and high impact project with very little net benefit could be approved.

The Trigger

PWCS repeatedly claims that they are obliged to build another terminal.

Port Waratah Coal Services (PWCS) justifies the need for the development in terms of its obligation under the Capacity Framework Arrangements (CFA), agreed between PWCS, Newcastle Coal Industry Group (NCIG) and the Newcastle Port Corporation (NPC), and approved under the Australian Competition and Consumer Commission (ACCC) in December 2009.

It is simply untrue to claim that T4 must be built by PWCS.

The relevant provisions of the CFA that outline this "obligation" are in clause 6:

6. Co-ordination of Expansion

Any co-ordination of expansion of terminal facilities or services in accordance with the following:

(a) Expansion by PWCS - When is obligation to expand triggered?

(i) Subject to section 6(a)(ii) and section 6(e), if:

(A) the Aggregate PWCS Contracted Allocations from time to time exceeds the Aggregate PWCS Available Capacity at that time ("**Capacity Shortfall**"); and

(B) the Capacity Shortfall cannot be fulfilled through voluntary Contracted Allocation Reductions,

PWCS must expand the PWCS Terminals to provide additional Capacity which, at a minimum, satisfies the Capacity Shortfall. However, PWCS will not be required to expand to meet any nominations for expansion capacity at the PWCS Terminals which nominate for allocations of less than 10 years.

(ii) Subject to section 6(e), if the existing PWCS Terminals are not capable of being expanded further to provide the additional Capacity that is necessary to satisfy the Capacity Shortfall, PWCS must build a new terminal to provide that additional Capacity. However, for the avoidance of doubt, nothing in this section 6 precludes any person other than PWCS from undertaking a project to construct a new terminal.

Note that under 6(a)(i)A, the obligation to expand requires a "capacity shortfall", and that the clause requires that this be calculated on the basis of "aggregate PWCS Contracted Allocations".

Clearly PWCS only has to build a new terminal if

- the existing terminals have no capacity potential
- if there is no other operator prepared to build terminal capacity
- if the coal industry has forced the issue by producing evidence that production will exceed shipment capacity.
- Does not require PWCS to build additional customer services such as stockpiles and blending operations.

The EA provides no proof that there is no capacity potential in existing terminals.

The EA provides no proof that there is no other operator prepared to build a terminal. Clearly the proposal by Hunter Ports provides proof that there is at least one other operator prepared to add major capacity to the Port.

The EA provides no evidence that production will exceed shipping capacity and that the "trigger point" has in fact been reached.

The EA does not explain why the construction of rail unloading facilities and direct ship loading would not satisfy the obligation under the agreement. The agreement does not say “would you like fries with that.” Stockpiles and blending are “fries”. Direct loading is practiced in other locations and direct loading would not leave PWCS without stock holding areas and blending capability.

These issues raise significant doubt as to the legitimacy of PWCS's fundamental claim in the T4 EA that the proposal arises from their obligations under the CFA.

The key question is does PWCS currently have a capacity shortfall as defined under the CFA, and if so, what is the total capacity that they are currently contracted to deliver in the future?

I suspect the proposal is more about securing the site to ensure that PWCS dominates coal export from Newcastle harbour. It is well documented that PWCS was unhappy about the establishment of the NCIG terminal and certainly did not openly welcome the Hunter Ports Proposal.

> Excerpt from the T4 Environmental Assessment, APPENDIX R Economic Assessment, p.9.
>
> As part of its obligations under the Capacity Framework Arrangements, PWCS has entered into long term 'ship or pay' contracts with coal producers and is responsible for ensuring its port facilities have sufficient capacity to handle the contracted coal throughputs. Where a capacity shortfall is predicted which cannot be accommodated by further expansion of its existing coal export terminals, the Capacity Framework Arrangements include a contractual obligation for PWCS to build a new terminal, that is the T4 Project or its equivalent elsewhere. Construction of a new terminal must be finalised within four years of the capacity shortfall being formally acknowledged. Producers serviced by PWCS have estimated that their requirements for port capacity in four years time (2015) will exceed the approved capacity for KCT and CCT of 145 Mtpa, based on growth in demand for terminal services forecast at 6.97% per annum to 2030 (PWCS pers. comms. 11 May 2011).

If PWCS's fundamental claim is false, the proposal should be withdrawn.

If the EA can be amended to show it is true then clearly the exhibition period must be extended or reopened to allow proper public consideration and comment.

The Assessment of the Premier and Cabinet of the Tinkler proposal would also appear to contain a major error in rejecting his project. The following letter shows that they did not want to upset the CFA and therefore changed the meaning of section 6 that clearly allows others to build terminals. The ACCC should be asked if this contravened their endorsement,

One has to wonder what the outcome of the Tinkler proposal would have been if there were not issues with his chosen site.

NSW GOVERNMENT | Premier & Cabinet

Hunter Ports: Unsolicited Proposal to NSW Government

Summary of Assessment

The proposal sought support for the use of Government land to build a 100MTpa coal loading facility in Mayfield, Newcastle.

The proposed benefits of the proposal include earlier and lower-cost expansion of coal loading facilities to support industry growth, the relocation of an existing freight rail line that impacts on local residents, and establishment of a community benefit fund. It was also asserted that current coal loader arrangements represent an anti-competitive barrier to entry for junior coal miners and off-shore traders, that would be addressed by the proposal.

Implementing the proposal would require substantial deviation from existing long term plans for the use of Government waterfront industrial land and for the development of the Newcastle Port. These plans aim to consolidate expanded coal loading capacity on Kooragang Island, across the river from residential areas. Industrial land in Mayfield is planned for expansion of non-coal freight and associated industrial activities. These plans aim to provide the diversified facilities necessary for economic and population growth over the medium and long term.

The second critical disbenefit is the risk to the Hunter Coal Export Framework and the ACCC approved Long Term Commercial Framework for the Hunter Valley Coal Chain. This framework now provides for the timely expansion of coal loading capacity as miners make commitments to require it. The ACCC reviewed the Framework in March 2011 and confirmed that it is operating effectively and in the public interest. The Framework has addressed significant previous problems of queued shipping and delayed investment. The proposal was assessed to be a source of significant uncertainty with the potential to destabilise the framework and investor confidence

These disbenefits clearly outweigh the potential public benefits. Therefore the Government has decided not to proceed with any further consideration of this proposal, and reaffirms its commitment to the current land-use, port development and coal chain plans and frameworks in the Hunter.

NSW Department of Premier and Cabinet

30 January 2012

Governor Macquarie Tower, 1 Farrer Place, Sydney NSW 2000 ■ GPO Box 5341, Sydney NSW 2001
Tel: (02) 9228 5555 ■ F: (02) 9228 5249 ■ www.dpc.nsw.gov.au

Trains

The T4 proposal is based on the transport of coal to be exclusively by rail with the typical journey being 100 to 200 kms with about 50 kms of the journey through heavily populated areas including the city of Maitland and Parts of Newcastle

The proposal and the EA does not discuss alternate coal transportation methods including conveyors coal slurry pumping or the use of a canal and barge system.

The EA does not discuss the options of locating the stockyards remote from the port.

The proposal does not discuss efficiency measures that could be applied to train transportation. The EA seems to take the attitude that is someone else's problem.

The EA also does not discuss the impact of coal freight transport for T4 on other operators, on other freight movements and on passenger services.

The EA does not address the impact on other rail line users of derailments, stalled trains and spillages.

The EA does not explain the responsibility of PWCS to clean up spillages and train wagon leakages.

The proposal and the EA does not provide details as to how emissions, dust and leakage of coal from trains enroute to the terminal will be dealt with. Further is seems to ignore that they exist.

The EA does not explain the safety procedures for loaded and unloaded coal trains to pass through station. Clearly with 80 plus extra trains from T4 alone the risk factor for people standing on platforms must be seriously increased. Where is the risk assessment?

The EA does not explain who will fund the upgrade of rail crossings that no longer meet the ALCAM risk assessment standards due to the extra train movements. If the extra train movements generated by the T4 operation require rail crossings etc to be modified then PWCS should fund the upgrades.

The EA provides no explanation as to how train dust, vibration and noise is to be monitored. PWCS can not expect to cart huge volumes of coal to the port without detailed real time monitoring.

The EA does not explain why bottom dumping wagons in sets of about 85 hauled by three locomotives is the most efficient and most environmentally efficient method of

coal transportation from the mines to the port. Other major ports including Richards Bay use other methods. RBCT and many others use solid bottom wagons and tipplers for unloading often with unloading times shorter than bottom dump wagons.

The location of the stockpile off site is certainly achievable and would have major and significant benefits. In simple terms it just means having the ship loader supply conveyor longer. If the stockyard was located west of Maitland then coal trains would be mostly eliminated from the residential areas of Maitland and Newcastle. Conveyors up to 100km in length are in operation in the World.

The train journey from the coal field to the PWCS site must be considered the prime responsibility of the T4 project operation as the train and train operation is an integral part of the project. The project would be unable to proceed if the trains were not upgraded. The EA must include this information.

It is acknowledged that ARTC and the above the track operators do have a responsibility however their performance must ultimately be the responsibility of PWCS and T4.

The terms and conditions of this responsibility and the performance standards must be written into the project approval conditions if the project is approved. The EA should provide drafts.

The terms and conditions must include T4 funded independent policing mechanisms together with automatic penalties for non compliance.

The Need For another coal ship loading facility

As a follow on from the previous section the EA should have explained why the existing terminals can not meet the shipping obligations under the Agreement.

We are told there is demand of the coal product the Hunter and nearby areas produce. As explained earlier this demand is softening.

I accept that Newcastle Harbour is a logical port from which to export the coal by ship from nearby regions.

I do not accept however that there is need for any additional coal berths.

I also do not accept that there is need for an addition terminal and additional stockpiles.

Up until about mid 1988 coal was loaded into ships at Hexham by RW Miller / Coal and Allied. The ships travelled via the Hunter River and were berthed along side a coal hopper and loaded by motor lorry tipping into a hopper elevator. The lorries moved the coal from the railway unloading area nearby.

Attachment 1 shows the coal transport history as displayed on the Newcastle Port Corporation web site. No time so you will have to look at NPC web site

Attachment 2 shows the coal transport history as displayed on the PWCS web site. No time so you will have to look at PWCS web site

This information shows that the Carrington Terminal was commissioned in 1976 without a stockyard and equipped with 2500tph ship loaders (which is the same capacity as in 2012)

The Koorragang terminal commenced operation in 1984

Historically ships were loaded in Newcastle Harbour with coal by tipping skips directly into ships.

The first of the modern ship loading facilities was the Carrington Terminal owned by the proponent of the T 4 facility.

The Carrington Terminal had a capacity of two ships with a maximum loading rate of 5,000 Tonnes per hour. (2x 2500tph.) This is almost the same as the 2012 loading rate.

Times have changed and so to must the technology and methods of preparing loads and the loading arrangements.

The EA does not recognise that the new T4 coal loader must not be permitted to be constructed whilst ever the existing facilities are not at their maximum and their potential not fully realized.

The same old same old is simply not acceptable in 2012.

The Port of Newcastle is the World's Largest Coal Export Port however by no measure could the coal activities of the port be considered to be Worlds Best Practice and no way could the port be considered to be the pace setter in coal handling and ship loading.

For example the ship loaders at the Carrington terminal are only capable of loading a ship at the rate of 2500 tonnes per hour (ref PWCS web site terminal information). The same ship Tai Prosperity 6 was unloaded at ..... Power station at 4500 tonnes per hour. (ref .....)after a slow loading at Carrington.

Clearly the difficulty in unloading a ship is very much more difficult than loading and it is unrealistic in 2012 that the same ship can be unloaded faster than it can be loaded at a Newcastle terminal.

Simply increasing the ship loading capability of Carrington to 15000tph will give the 109.5m tonnes of extra port more capacity. This extra capacity would go a long way to completely eliminating the need for the proposed T4 project.

This logic also applies to the ports other coal berths.

If all 8 existing berths were to load at 15,000tph for 20 hrs per day then the port theoretical maximum capacity would be 876 million tonnes. Current output is only about 14% of that.

Clearly there is massive potentially underutilised capacity in the existing facilities that is not identified by the EA.

To achieve increased tonnage there needs to be some major improvement in the very poor ship loading performance of the existing berths.

The following section shows the performance of each wharf and of each terminal

Newcastle Coal Wharf Utilisation

Prepared by Rick Banyard 5/5/2012

The following table 1 shows the summary of the coal wharf activity for the first four months of 2012.

These results are similar the results of the 2011

The percentage or wharf use varies from as low as 25% with a high of 85%

The table shows an average loading time from 28 hours and 18 minutes to 35 hours. This is a major difference from the HVCCC 's quoted loading times (Table 3) and massively over the best theoretical time.

A key question is why can the fastest loading time be 13 hours and the slowest being 103 hours?

A second key question is why are some loadings so slow for the same ship? See table 2

A third key question is why is KCT so slow given their ship loaders are 3 x 10,500tph and CCT are only 2 x 2,500tph capacity?

When a berth is empty why should multi loaders not fill one ship as is at times done at Carrington Terminal?

The HVCCC data is only provided for PWCS terminals. This data shows faster loading times. This could be due to the clock only recording the actual time that coal is being deposited in the vessel. See table 3. HVCCC shows no basis for their calculations.

NCIG has an average cargo capacity of about 62,800 tonnes from an 8500tph reclaimer and 10,500tph ship loader giving a theoretical load time of 7 hours and 24 minutes. (25% efficient)

PWCS KCT has an average cargo capacity of about 95,000 tonnes from an 8500tph reclaimer and 10,500tph ship loader giving a theoretical load time of 11 hours and 10 minutes. (38% efficient)

PWCS CCT has an average cargo capacity of about 70,000 tonnes from and 2500tph reclaimer and 2,500tph ship loader giving a theoretical load time of 30 hours and 0 minutes. (86% efficient) (NOTE at times 2 loaders are used on one ship)

If all coal loading was raised to 10,500tph there would be a massive increase in Port through put and resource utilisation.

All terminals have more than one reclaimer that could feed the ship loader.

The HVCCC figures strengthen the argument that the wharf utilisation level is low and that there is considerable capacity in reserve.

It should also be noted that the KCT only has 3 loaders for 4 berths. Why? (that is one wharf T4 does not need)

Allowance has been made in the calculations for the use of K7 and K9 for only part of the period.

PWCS shipped 96.9m tonnes in 2011 which was a slight increase on previous years with 30% of loading capacity unutilised. This spare capacity would give PWCS 140m tonne capacity. The elimination of slow ship loading by halving the load time of the slowest 30% is guestimated to give about 40m Tonne increase. The raising the hourly ship loader capacity by 10% would allow an extra 18m tonnes per annum.

The improvement in terminal efficiency will give PWCS an extra capacity of 100m tonnes or more than double the existing PWCS capacity without the construction of T4.

The claim that the shipping movements are tide dependent is questionable given that almost all ships can enter the harbour empty and only about 160 ships have a draft greater than 15m. The run out tide and sea conditions can have an impact on marginal vessels.

If you drive past the coal berths and there is no ship then that is a massive waste of infrastructure.

If you drive past the coal berths and there is no ship loader in operation then that is a massive waste of infrastructure.

Both of these situations is unfortunately very common.

Table 1 Summary of Activity by Wharf and Terminal

	D4	D5	K4	K5	K6	K7	K8	K9	CTT	KCT	NCIG	Total
Ship Numbers	56	60	74	81	**80**	25	58	23	116	260	81	457
Days for period	121	121	121	121	**121**	68	121	107	242	431	228	901
Total Wharf Hours for period	2904	2904	2904	2904	2904	1632	2904	2568	5808	10344	5472	21624
Total Wharf use hours	1947	2097	2124	2293	**2371**	707	1770	652	4044	7495	2422	13961
	2904	2904	2904	2904	2904	1632	2904	2568				
	1947	2097	2124	2293	**2371**	707	1770	652				
Percentage of wharf use	67%	71%	73%	79%	82%	43%	61%	25%	70%	72%	44%	65%
Average ship loading time	34.8	34.6	28.7	28.3	29.6	28.3	30.5	28.3	34.9	28.8	29.9	30.5
Fastest load time	20	16	19	13	14	15	15	14	36	61	29	126
Slowest load time	53	69	62	46	103	43	57	56	122	254	113	489

The calculations are based on all the ships departing Newcastle between January 1 and April 30 2010 (inclusive).

The base data, methodology and full calculations are available on request by contacting cdcopy@hunterlink.net.au

Table 2 Sample Ship loading times

Vessel	Fastest	Intermediate	Slowest
AOM Sophie	30:20	33:30	45:49
Chemtex Prudence	16:42	32:05	40:15
China Steel Excellence	30:18	36:45	38:39
Corona Dynamic	18:30	18:53	39:40

All vessels have completed 3 shipments in the first 4 months of 2012.

Table 3 Hunter Valley Coal Chain Coordinator (HVCCC) statistics.

Coal Wharf Usage

why do we need more coal loaders?

	Vessels			load time avg			coal out PWCS		Hours available		total loading time		% time used to load	
	kct	cct	total	kct	cct	stock pile quantity	mil tonnes	Avg cargo	ktc	cct	kct	cct	Ktc	cct
2009 year	*741*	*327*	1068	*21*	*31*	*880265*	*92.984*	87064	26280	17520	15561	10137	59%	58%
2010 year	*717*	*347*	1064	*21*	*32*	*943827*	*95.616*	89865	26280	17520	15057	11104	57%	63%
2011 year	868	410	1017	20	30	12337868	96.985	95381	26280	17520	17502	12254	67%	70%
Jan-11	*61*	*29*	90	*21*	*31*	*887730*	*8.492*	94356	2160	1440	1281	899	59%	62%
Feb-11	*51*	*22*	73	*21*	*33*	*577899*	*7.04*	96438	2016	1344	1071	726	53%	54%
Mar-11	*52*	*22*	74	*19*	*28*	*942844*	*6.947*	93878	2160	1440	988	616	46%	43%
Apr-11	*62*	*27*	89	*19*	*29*	*907074*	*8.462*	95079	2232	1488	1178	783	53%	53%
May-11	*55*	*23*	78	*19*	*31*	*1034214*	*7.667*	98295	2232	1488	1045	713	47%	48%
Jun-11	*61*	*31*	92	*19*	*27*	*1263229*	*8.422*	91543	2160	1440	1159	837	54%	58%
Jul-11	*56*	*31*	87	*20*	*30*	*1489220*	*8.186*	94092	2232	1488	1120	930	50%	63%
Aug-11	*60*	*29*	89	*21*	*32*	*894736*	*8.866*	99618	2232	1488	1260	928	56%	62%
Sep-11	*62*	*29*	91	*20*	*29*	*1256455*	*8.657*	95132	2160	1440	1240	841	57%	58%
Oct-11	*54*	*30*	84	*21*	*31*	*1679068*	*8.151*	92440	2232	1488	1134	930	51%	63%
Nov-11	*53*	*23*	76	*23*	*32*	*1288714*	*7.765*	102171	2160	1440	1219	736	56%	51%
Dec-11	*68*	*33*	101	*20*	*27*	*1035108*	*9.556*	94614	2232	1488	1360	891	61%	60%
	173	81									3447	2424		
Jan-12	*68*	*34*	102	*18*	*30*	*1082754*	*9.31*	91275	2232	1488	1224	1020	55%	69%
Feb-12	*66*	*21*	*87*	*19*	*30*	*915652*	*7.720*	88736	2088	1392	1254	630	60%	45%
Mar-12	*56*	*28*	*84*	*18*	*31*	*1362283*	*7.354*	87548	2232	1488	1008	868	45%	58%
Apr-12	*70*	*33*	*103*	*20*	*30*	1176754	*9.928*	96388	2160	1440	1400	990	65%	69%

Notes

The italic figures are from the Hunter Valley Coal Chain
The normal figures are calculations from the Hunter Valley Coal Chain data
The Dec 09 figures are for the year ended December 2009
The Dec 10 figures are for the year ended December 2010
The Dec 11 figures are the 2011 monthly figures annualised using the first 9 months data
KTC is Koragang terminal
CCT is Carrington Coal Terminal
K7 from feb 2012

The usage figures support the figures calculated from Port Corp Data
The other table shows the usage by wharf and includes NCIG.

Table 4 Ships by draft 2011

Vessels by maximum draft from 1 1 2011 to 17 11 2011

Note this is vessels max draft and the same ship may have had other visits at a lower draft
Mean Harbour min depth 15.2m

Ships over 12m draft	90
Ships over 13m draft	141
Ships over 14m draft	122
Ships over 15m draft	168
vessels over 12m	521
total vessels	865
port movements for period	3450

Table 5 Average time in hours to load a ship with existing equipment

	2011 first 4 months	2012 first 4 months	HVCCC	Theoretical Minimum time
Kooragang Coal Terminal	25.3	28.8	19	11.2
Carrington Coal Terminal	30	34.9	30.2	30
NCIG Terminal	32.5	29.9	Not available	7.4

Note The CCT does use two ship loaders on one ship at times.

All these tables and supporting notation show that the performance of the existing terminals have considerable unexploited capacity.

It is unreasonable and unrealistic to allow the T4 project as proposed to be granted approval until such time as the existing warfare is utilized to a near capacity level.

The claimed obligation of the EA for the construction of T4 is therefore not established and the proposal should be withdrawn.

A key area of the PWCS terminals and to a lesser extent the NCIG terminal need a major rethink of the need for and design of the coal stockyards.

A major issue with any coal terminal located within a city is the negative impacts of that terminal on the residents and community.

The negative impacts include noise, dust, vibration, vista and the impacts of coal transport. These are the very reasons given by the government in rejecting the Hunter Ports application.

From the EA there are a number of issues the T4 proposal fails to address about the infrastructure.

Nowhere in the proposal does the EA or supporting application information explain why the stockyard is essential and why it could not be remote from the Port.

Whilst there is little option in Newcastle's case to load ships other than in the harbor there is other options for the stockyards and their operation.

Some of the options include:-

Reducing storage blending and cargo assembly on site

Reducing the blending options to clients

Reducing the number of grades handled

Locating the stockyards to other locations

Placing the stockyards within buildings

There is also need for the EA to reassess the coal transport arrangements to the Port and the empty returns.

The T4 project is requiring a major upgrade of the transport of coal to the new facility.

The T4 project must include the latest transport technologies and freight capacity.

This must include for rail transport

Double stack wagons
Zero train coal leakage
Zero train coal dust emissions
Low noise trains

Minimum vibration trains

The T4 project must have an undertaking to contribute to the “western rail bypass” in order to eliminate the carriage of coal through the suburbs of Newcastle

The EA T4 project proposal needs to explain why other forms of coal transport are not options.

Other forms of coal transport could include conveyers, pipelines and barges.

it should be noted that there has been significant improvement in conveyor technology in recent years allowing greater distances, longer life, higher reliability and greater capacity.

Ship loaders could operate without stockyards in the following manner

A coal would come to the port by train and be unloaded into a hopper and directly on to the ship.

B coal would come to the port by conveyor and directly into the ship loading hopper.

In both cases the input would be matched to the ship loader capacity.

To increase the tonnage through put of each existing coal ship loader may require some changes to the consent operating rules and regulations that apply to each of the terminals. These changes would be far more acceptable than to construct a totally new coal terminal as is proposed with T4.

Surely consent for a new terminal should not be based on promoting inefficiency and under utilisation of resources.

The Port should be using multi wagon tipplers to increase unloading speed and to eliminate wagon door leakage that pollutes the environment.

I would argue that if the T4 site was not available then there would be no option other than to improve the performance of the existing terminals.

The rejection of the T4 proposal will result in major efficiency gains in the existing facilities. Surely that is highly desirable.

The falling coal prices and lessening of demand is forcing many of the worlds terminals to rethink their expansion strategies. In Australia many of the other large

terminals are also proposing or have underway major export expansion developments.

In recent weeks there has been the closure of coal mines due to the viability of the operations.

The rail facilities in the Hunter as in many other parts of the world are holding back coal exports.

The capital works funding for rail lines is mostly supplied by Governments. As governments come under increasing financial pressure the ability to provide rail line construction and upgrade capital dries up. In South Africa governments have announced there will be no more rail capital funding.

Falling coal prices, massive increases in export capacity world wide combined with the inability of the rail line to feed the port the prospects are certainly not as bright as PWCS indicates in their literature.

When considering the T4 proposal it should be noted that the proposal by Hunter Ports was rejected with one of the reasons being the lack of need for the facility.

If the T 4 project is approved then the conditions of consent must require the facility to be constructed as proposed and there be no provision for a delayed start or staged development.

To summaries the above issues I would argue that there is no need for the T4 project because:-

- # The existing terminals are below capacity
- # The existing loading rates are only a fraction of the potential
- # The environmental, pollution and health issues are massive

Remediation plan and levels

The T4 project will greatly modify the landscape and river by the construction of the stockyard, wharfs and other infrastructure.

This construction is very expensive and complex.

When the operating licence expires, the company ceases to trade or coal is no longer an exportable commodity then there must be a very clear and binding obligation to return the site and river to a predefined state.

The site remediation and restoration will be very expensive and it is totally unreasonable for the Government, a future occupier or the community to pay for the works.

The consent conditions, if approval is granted, must very clearly define the works to be undertaken and importantly must guarantee the funding for such works even in the event of insolvency, liquidation or ownership changes.

Rick Banyard

I have no interests in this projects other than as a community citizen.
I have made no political donations in the last two years.

Rick Banyard
14 Bell St
Maryville
2293
0419993867
cdcopy@hunterlink.net.au

Planning NSW
Attention Rebecca Newman
02 9228 6340
rebecca.newman@planning.nsw.gov.au

RE T4 submission. application number 10_0215

I wish to lodge a submission strongly objection to the PWCS T4 proposal.

This submission concentrates on the river shipping aspects of the proposal and is in three parts.

- The T4 proposed berths
- The swing
- The impact of the ships

The T4 Proposed berths

The T4 proposal consists of a swing basin and 5 berths. Two on the Mayfield side and three on the North side of the Hunter River South arm with a deep shipping channel.

The shipping channel, the wharfs and the swing basin all require massive dredging and excavation of the harbour floor to well below the levels intended by nature. The removal of river bed foundation material in massive quantities is totally unacceptable and not explained reasonably in the EA.

The establishment of the berths require massive changes to the river banks. These changes include changing the river bank heights, adjusting the river width, changing the surface flows and changing the river volumes. There are also massive changes to the mangrove, vegetation and ecology of the river banks and adjoining land.

The EA has not adequately addressed these changes and the impacts of these changes was not discussed at any of the considerable number of community consultations I attended.

The location of the berths immediately adjacent to Tourle St Bridge will have a major impact on the vista of the area.

The distraction of huge ships at close range will also almost certainly act as a major distraction to motorists breaking their concentration, slow their passage and likely cause traffic bottlenecks from collisions.. This is likely to have a major implications for motorists. The EA offers no solution to this issue.

The construction of five berths capable of handling some of the harbours largest size ships at the extremity of the harbour when other coal berths are very underutilised is simply unacceptable and a great waste of resources.

The South arm width at the point where the berths are to be located is about 200m wide. Cape size ships are 50m wide. If the wharf encroaches into the river by 20 metres then 200 – 50 – 50 – 20 – 20 only leaves 60 metres of river space. The EA does not explain how the "river blockade" will impact on the rivers ecology, fish, prawns and very importantly flood flows. Will the blockade of the South Arm raise the river flows in the North Arm? Will the river flood heights upstream to Raymond Terrace be affected. What will be the impact on tide movements? The answers to these and other key questions do not seem to be in the EA.

A very large Mayfield public meeting in late 2011 confirmed that the community did not want any coal wharfs on the Mayfield side of the river.

The rejection of the Hunter Ports proposal by Nathan Tinkler's used as a rejection the fact that the Mayfield side was for port activity other than coal.

Due to the proximity to the major roadway the berth site would have many other uses, One could be another marina. This would bring considerable employment and great local spending whilst having only minor impacts on the river, the environment and the ecology.

Clearly the proposed T4 berths are not in the best interests of the community, the Port, Newcastle LGA or the Hunter Region.

The Swing Basin

The following is my submission to Application Number DA-134-3-2003-I MOD 8 Relocation of Swing Basin,

I consider the points raised in that submission are still totally valid and applicable to the T4 application.

I have no recollection of the swing basin details being discussed in any detail at any of the community consultation sessions I attended.

I wish to repeat the following points.

1. **Lack of Consultation**

I am unaware of any community consultation about this current proposal. I discovered it by accident on you web site by chance. I note it is tagged as "remediation of contaminated land." and appears not to have been lodged until the 11th May 2011.

The application does not seem to be "substantially the same" as it is located downstream by 200m and is very much bigger with a diameter of 500metres compared with 420metres and an increase in circumference of 250 metres. It is also 6 years since the original application was approved (8 years since lodged) and considerable changes have occurred in the elapsed time.

The new application also now reaches inland a considerable distance as opposed to being mostly contained within the river.

The application signed by Garry Webb CEO states in point 7 "this application is to modify only the physical location of the swing basin" It makes no reference to the increase in diameter and the major impact to the shoreline and vegetation.

The statement of environmental effects attached to the application is dated June 2011.

That document records no community consultation for the substantial change to the project.

The absence of any submissions from the community, community organisations and governance sectors is further evidence that there was no community consultation and that the community is basically unaware of the proposal and its impacts.

The agency comments all raise serious concerns especially about the impacts on the river banks due to the 80 metre greater diameter

2. Absence of Port Master Plan

This application seems to be undergoing the approval process in absence of a public and approved Newcastle Port Master Plan.

The absence of the Master Plan means among other things that there can be no cumulative impact assessment of Newcastle Port development or operational activities.

A Port Master Plan is clearly a key and fundamental document that must be referenced and responded to as part of this major works.

This part of the river has certainly changed very significantly from the time it was Shelly Beach.

3. Mangroves

The Statement of Environmental Impacts (SEI) acknowledges that there is a significant Mangrove forest on the area and that the new proposal for a swing basin will result in the removal of considerably more mangroves than previously. The SEI relies on 2003 data and does not take into account the considerable growth and expansion of the Mangroves since 2003.

As development work is carried out within the harbour the function of Mangroves becomes more important. Further removal is totally unacceptable and this alone should be sufficient grounds for the rejection of the swing basin.

The consent conditions dated 9 August 2005 in relation to Mangrove removal state "to limit the extent of Mangrove clearing to the minimum necessary" Clearly the sought after 500 metre diameter will basically eliminate the Mangrove forest.

In the response to the CMA submission of the earlier proposal it was stated that "a compensatory habitat package will be developed to offset this loss of vegetation and will result in a nett improvement in Habitat within the Hunter River estuary. This new application provides no information about this or if the area of compensatory will also be increased in size to match the removal area on both sides of the river.

I note the I&I NSW approval is also very concerned about the removal of the mangroves and draws attention to the heavy fines.

4. Project is not needed

Nowhere within the application or SIE is there any assessment of the need for the swing basin.

The table below developed from port shipping information clearly shows the low level of use of port wharfs in the proposed area. It must be noted that the table only shows wharf occupation. Actual coal loading is only about half this time.

Newcastle Coal Wharf Performance

From 1/1/2011 to 6/5/2011

Wharf	Total Wharf Hours	Max Wharf Hrs	**% time berth Occupied**	Number of Ships	Avg Time (hrs) at berth
D4	1611	3024	**52**	53	30
D5	1866	3024	**61**	53	30
K4	1977	3024	**66**	78	20
K5	1325	3024	**43**	53	30
K6	2030	3024	**67**	78	26
K8	966	3024	**31**	35	28
K9	1745	3024	**57**	47	37

Full details of data used to produce this table are available on request. The figures for 2012 are also available.

There is little doubt that better port management, wharf management and faster coal loading will give the Port a very significant increase in through put without the need to further destroy an important sector of the Hunter River.

Put simply there is no case to support the need for additional wharfs or the swing basin.

It should be noted that the Port has been operating including wharfs K8 and K9 in a highly satisfactory manner of quite some time without the need for the proposed swing basin.

5. <u>Tourism and recreational activity</u>

The SIE makes no comment about the impact on recreational use of the harbour and in particular the South Arm of the river by the swing basins construction and operation.

This is unreasonable as the area is used by many for recreational purposes including fishing, boating and other passive activities.

There is also no information about the negative impacts of the swing basin operation and the impacts of additional shipping as a result of the very much larger swing basin.

There is no detail provided as to how the tourism aspects of the Harbour will be improved by this development. The construction of a viewing area, parkland and tourism facilities to allow access to the harbour in this area and to allow viewing of shipping movements could be a benefit to help offset the huge negatives.

The RTA has commented that due to the closeness of the greatly enlarged swing basin to Cormorant Rd bunding, walls or other structures should be installed to prevent viewing. This is a totally unacceptable option and is quite the reverse of what should happen. It is unclear of the impact of the swing basin on the "windmill" and this is further clouded by the RTA comments.

In summary the negatives of the swing basin construction and operation could be offset by quality recreational and tourism provisions.

Theses should be spelt out in the conditions of consent after being agreed to by the community and interested parties.

6. Remediation

A consent condition, if this project is approved, should be that once the swing basin is no longer in active use then the area be rehabilitated to a natural river frontage condition.

The Impact of the ships.

A picture says a thousand words.

Here is my 1000 words on the impact of coal shipping.

Please remember that T4 berths are further up the harbour than any other berth.

I thank you for reading my submission and trust it can be taken into consideration.

I have made no political donations and have no vested interests other than as a community member and resident of Newcastle and a long term involvement with the Hunter.

Rick Banyard
7 5 2012